

Industry Engagement: Impact of COVID-19

CitiPower, Powercor and United Energy Stakeholder Workshop (09/09/2020)

Prepared for: Brent Cleeve, Head of Regulation, CitiPower and Powercor
Sonja Lekovic, Senior Regulatory Economist, CitiPower and Powercor

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Background, Research Objectives and Methodology

Industry Engagement Background

CitiPower, Powercor and United Energy heard in many stakeholder submissions the concerns the pandemic had raised with their original proposal.

In response, CitiPower, Powercor and United Energy commissioned Forethought to facilitate Stakeholder Engagement Workshops to collect feedback and holistic industry thinking on how best to manage these concerns in the future.

The networks were interested in the industry understanding of short and longer term impacts the pandemic may have on key assumptions. These discussions were the basis for the revised regulatory proposal that included energy demand, connections, solar PV and revenues.

On the 9th of September, 2020 26 stakeholders participated in these online workshops that included representatives from energy regulators, government, industry bodies, peak bodies and charities.

Challenge and Objectives

Business Challenge

- Submit a regulatory reset proposal to the AER that best reflects the interests of the key industry stakeholders of CitiPower, Powercor and United Energy

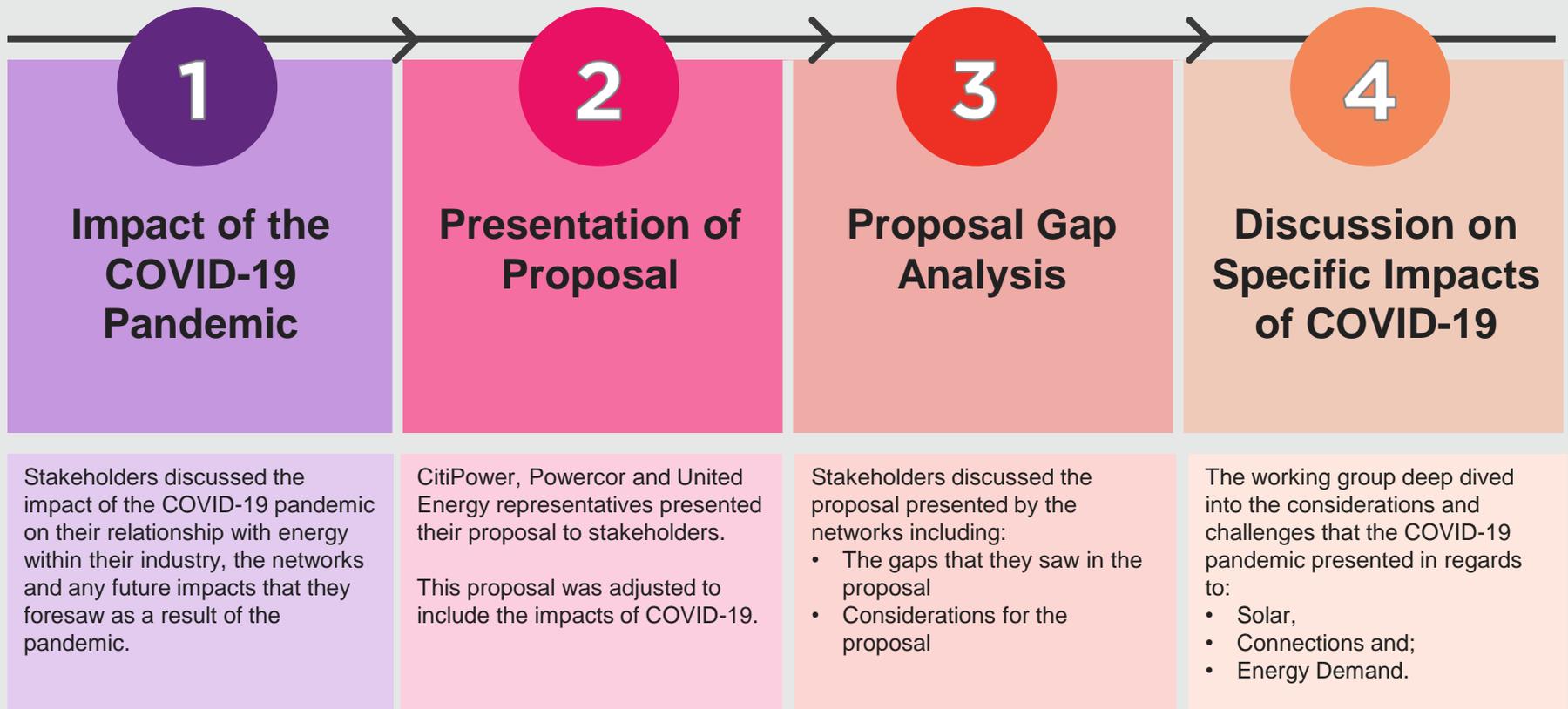


Research Objectives

- Present the regulatory reset proposal to industry stakeholders with COVID impacts taken into account;
- Understand and contextualise CitiPower, Powercor and United Energy stakeholder's short-term and long-term impacts of the COVID-19 pandemic on key assumptions within the proposal including:
 - energy demand,
 - connections,
 - solar PV and;
 - revenues.

Workshop Design

The online workshop design comprised of four key areas where stakeholders were navigated from Townhall to Breakout Groups to ensure all stakeholders had the opportunity for their thoughts and feedback to be heard and part of the discussion.





The current and future impacts of COVID-19

In breakout rooms, groups discussed the impacts that COVID-19 represented for them and their constituents relationship with energy and the networks.

There were three key areas that impacted stakeholders and their constituents as a result of the COVID-19 pandemic:

1. Economic and financial impacts;
2. Customer relationship and energy demand impacts; and
3. Operational impacts.

Activity 1:
What are the current network impacts that COVID-19 has represented for you and your stakeholders?

The pandemic was seen to negatively financially impact specific customers and the networks

The economy has taken an enormous hit as a result of the COVID-19 pandemic. Wage, population and economic growth have been impacted considerably with this spurring uncertainty about future infrastructure spend and the impact that this would have on the grid.

With some industries shutting down and unemployment rising, the financial impacts to customers were seen to be disproportionate. Whilst many vulnerable customers had experienced a shortfall in finance as a result of the pandemic, some had also experienced an increase with government payments such as JobKeeper and JobSeeker providing more finance to some customers than usual. This had implications for the ability of customers to pay energy bills and access hardship support and has also led to increase in the pooling of resources, particularly amongst younger residential customers.

“The hardest part is predicting what is going to happen next. It’s all about planning operationally and economic factors.”

Workshop Stakeholder

Activity 1:

What are the current network impacts that COVID-19 has represented for you and your stakeholders?

Changes in the user profile of energy has impacted the way that networks interact with their customers

Stakeholders referenced change in energy consumption from commercial to residential as a major impact of the COVID-19 as workers and students are forced to work and study from home.

This posed many impacts and risks for stakeholders including:

- **The affordability of energy** for residential customers due to increased consumption during the day;
- **Load management** due to changes in peak energy demand has shifted as retailers and hospitality industries have closed and residential consumption increased; and
- **A greater sensitivity towards outages** during the day for residential customers.

Many expressed their satisfaction with the manner that the networks had interacted with customers by offering support packages, however, there was concern that some customers may not be aware of the support systems available to them.

Activity 1:

What are the current network impacts that COVID-19 has represented for you and your stakeholders?

Project delivery was negatively impacted, however, stakeholders were pleased with the transparency provided by networks in their communications

Many stakeholders mentioned that the **efficiency of capital works had diminished** as a result of the pandemic. This was seen to be a result of social distancing measures, delays in capital and equipment coming from overseas.

Despite the disruption to productivity that COVID-19 had reaped, stakeholders expressed **satisfaction that their relationships with the networks had improved since the beginning of the pandemic**. There was more transparency and regular contact to discuss issues despite a lack of face-to-face contact.

“There has been a changed responsiveness from distributors and a shared understanding of what the issue is [since the start of the pandemic].”

Workshop Stakeholder

Stakeholders were asked to discuss what should be taken into consideration as a result of COVID-19 and the impact it will have on networks in the next 5 years.

Many of the considerations were both current and future impacts. Stakeholders raised concerns, questions and recommendations for managing the impacts of COVID-19 which included managing:

- **Economic and financial impacts**
- **Changes in connection and demand profiles**
- **Provision of project delivery and operations**
- **Technology and decarbonisation impacts**

Stakeholders expected more communication, granularity of data and support packages to manage the economic and financial impacts of the pandemic

Due to the disproportionate impact of COVID-19 on different customers, there was an expectation that **a greater provision of data and communication to stakeholders was the best method to understand customer behaviour**. This included more detailed and granular data to predict the behaviour of certain customer types and help build agency and affordability.

Macroeconomic factors such as population, economic and wage growth decline were also discussed, with the expectation that forecasts should be changed to take into consideration slower population and load growth in Victoria.

For the networks, there was an expectation that there would be a loss of revenue from business customers who were shutting down and vulnerable customers pooling more resources that would impact their bottom line. It was expected that this be factored into forecasts.

Activity 2:

Future state: What concerns need to be taken into consideration as a result of COVID-19 and the impact it will have on networks in the next 5 years?

Demand profiles were expected to continue to shift, with stakeholders expecting more customer data with greater granularity to manage these changes

Stakeholders generally thought that as a result of the pandemic, consumption of energy and demand for network capacity will vary by sector, and will drive changes in investment.

Residential

Residential consumption has increased in the short term as Australians are forced to stay at home. It was thought that the working from home trend would continue into the long-term and shift demand from commercial to residential.

Ensuring residential customers had greater agency was seen to be the key to ensuring positive customer/ networks outcomes. Stakeholders wanted to see more communication with residential customers to and a better utility of customer data to manage residential energy consumption, particularly during the day. This included optimising customer experience, particularly as it related to planned outages and load management.

Commercial

Commercial consumption and peak demand has been negatively impacted as retailers and the hospitality sector close and is not expected to reach pre-COVID levels in the next 5 years.

Ensuring commercial customers had access to financial support packages and were given confidence through thorough and predictable forecasts, was seen to be the main way to mitigate the impacts of the pandemic on their relationship with the networks.

Industrial

The industrial sector will also be negatively impacted as demand for goods slows. Similar to the commercial sector, a slower recovery to underlying levels was expected by stakeholders.

Despite this, there were some stakeholders who were optimistic about an increase in on-shore manufacturing in Australia.

Activity 2:

Future state: What concerns need to be taken into consideration as a result of COVID-19 and the impact it will have on networks in the next 5 years?

Decarbonisation of the industry may take a pitfall in the short-term but longer-term growth was seen to hinge on increases in technological innovation

Decarbonisation of the economy was seen to take a back seat in the short-term as companies try to survive financially. The underlying necessity of decarbonising business operations is a long term trend that may be slowed, yet not abandoned.

Usage patterns may change for solar PV and battery, particularly for in-growth corridors where new connection rates will slow. Many believed that the pandemic may have spurred a speed-up in the rate of technological innovation, being the key ingredient for ensuring decarbonisation of the grid.

Activity 2:

Future state: What concerns need to be taken into consideration as a result of COVID-19 and the impact it will have on networks in the next 5 years?

Flexibility and transparency in operations were critical to mitigate these risks

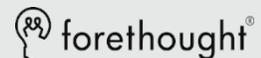
In the short-term, **potential supply chain delays were expected to continue**, particularly for major capital expenditure requiring equipment or expertise from overseas. Manufacturing and delivery processes may need to be shifted as some Stakeholders suggested that there will be greater on-shore manufacturing in the medium to long-term in Australia as a result of the pandemic.

Capital works delivery was likely to be delayed by a slow-down in project approvals and delivery of works as a result of disruption to normal operations and work practice restrictions. This was expected to be short lived and may result in a delay in project timing.

Stakeholders asked for greater communication and transparency from the networks in communicating these operational challenges. Flexibility and innovation was proposed in the short-term to ensure that operations could continue business-as-usual.

Activity 2:

Future state: What concerns need to be taken into consideration as a result of COVID-19 and the impact it will have on networks in the next 5 years?





Gap Analysis: What needs further consideration in the proposal?

Stakeholders responded to the proposal, offering their feedback on what was missing and what required consideration.

Many stakeholders were satisfied with the quality of the forecasts proposed.

Stakeholders generally agreed that smoothing of volatility in forecasts for customer price trends was required. This was particularly for low-income and SMB.

Key themes included:

- forecast integrity and granularity;
- changing consumers trends and potential innovations;
- government changes and policy risks; and
- changes to productivity and revenue.

Following the presentation of the proposal, considerations and questions were discussed. Four key themes arose...

Forecast integrity and granularity	Changing consumers trends and potential innovations	Government changes and policy risks	Potential Changes to productivity and revenue
<ul style="list-style-type: none"> There was some confusion that the proposal focussed too heavily on macro-trends rather than micro-trends. Many saw the forecasts to be high-level and did not take into account the impact of the pandemic on a more granular level. This included giving forecasts that were industry- based, age-based, geography-based and included elasticities in age groups and elasticities in energy. There was no consideration of customers moving to regional centres from Melbourne and the impact that this would have on demand forecasts for the three networks. <p><i>“Where is it based from? Is it triangulated with data from real-estate agents and appliance manufacturers and retailers?”</i> Workshop Stakeholder</p>	<ul style="list-style-type: none"> Some stakeholders mentioned that the forecasts did not factor in potential increases in gas and hydrogen use in the future. This also included potential innovations in solar enablement such as a greater rollout of community battery and other changes to the grid. Disruptions to solar uptake / not enough information was seen to be accounted for, within forecasts. This included reduction to solar uptake in growth belts. <p><i>“Solar has mainly been in the growth belt. Are we taking into consideration mortgage deferrals in these areas?”</i> Workshop Stakeholder</p> <p><i>“The proposal was rear-vision focussed. It’s not anticipating potential future impacts of COVID.”</i> Workshop Stakeholder</p>	<ul style="list-style-type: none"> Many thought that the forecasts should have taken greater consideration of potential infrastructure policy that could be implementation as a result of the pandemic. If Victoria chose to invest in infrastructure programs, it could increase project delivery. Stakeholders wanted to understand the extent potential changes in State and/ or Federal Government would have on infrastructure and renewable project spend. Some were conscious that Labor may lose power at the next Victorian State Election and this was expected to be taken into account within the forecasts. <p><i>“What if there’s a change in government? Where’s the contingency there?”</i> Workshop Stakeholder</p>	<ul style="list-style-type: none"> Some stakeholders thought that the forecast did not factor in the changes in productivity on major projects and the delays in manufacturing and shipping that have been experienced. This was seen important as they relate to changes in the cost of equipment. <p><i>“How has COVID impacted the cost of business on their operations? Half-crews, low productivity.”</i> Workshop Stakeholder</p>



COVID Impacts and Specific Facets of the Energy Industry

Connections

Certain government subsidies were seen to mitigate short-term impacts on customer numbers, however, long-term impacts were not seen to be fully mitigated.

Large connections, particularly those driven by government spending were thought to be less impacted by COVID-19 as Governments will be incentivised to drive economic activity through investment in infrastructure.

JobKeeper and JobSeeker were seen to be suitable short-term solutions as stakeholders were conscious that the pace of economic recovery would dictate customer numbers. The bigger question for many stakeholders was - how long these support packages will last.

Home builder was not seen to be a sufficient program to reduce the impact of the pandemic on connections in the short or long-term.

There were some stakeholders who proposed that there were different drivers for new connections, solar uptake and consumption levels and these should be taken into account within the forecasts.

For some stakeholders, **population and migration increases were the most likely to lead recovery, not government subsidies.**

Energy Demand

There was seen to be a clear short-term impact on network demand as a result of the pandemic with a potential for smoothing long-term trends

The clear trend for changes in energy demand relate to the shift from commercial to residential with key changes to :

- time of peak demand; and
- volume of energy used

However, many speculated that there would be further reduction in small business demand, outweighing any residential demand increase.

Whilst *working from home* was thought to become a long-term trend, there was uncertainty as to what this would mean during summer months, with more air-conditioning being used for those working and studying from home.

An increase in on-shore manufacturing may also impact demand as an increase in certain industries isolated to the Powercor network (such as agribusiness) and more Melbournians moving to the regions.

“Working from home has been brought forward permanently. This may shift demand curve permanently.”

Workshop Stakeholder

Solar

The Solar Homes Program was seen to be an effective program, however, more was required in provision of technology to promote solar enablement.

Much of the discussion surrounding the impact of COVID-19 on solar did not surround the uptake of solar PV, however, focused on the need to fast-track community battery technologies to optimise solar usage in Victoria. This important as working from home trends mean the peak demand period has shifted.

The Solar Homes Program was seen to be a viable program for those with a fixed, reliable income, however, it was not seen to take into account those in vulnerable circumstances. Given the impact that COVID-19 has had on vulnerable customers, in particular renters, many reasoned that the program had to be updated to ensure these customers have greater access to solar.

“There’s now a large amount of people with significant reduced income that are in no position to take up solar program.”

Workshop Stakeholder

There was scepticism about the relationship between economic conditions and uptake of solar PV.

Whilst it was agreed that renters were still impacted in their ability to uptake solar PV, for many there was an inverse relationship between uptake of solar PV and income.

Whilst a slow-down in new real-estate was seen to impact solar connections in new homes, solar PV was seen as home improvement and a means of relieving financial stress for home owners and therefore won't necessarily slow down growth in the sector.

“Solar is more attractive than ever before if you have a job.”

Workshop Stakeholder

“Poor economic conditions may not correlate with decrease in demand for solar.”

Workshop Stakeholder

“Solar growth may continue. There is a role for Solar to be a mitigator of financial stress and it could be used to support people in financial stress.”

Workshop Stakeholder

Appendix: Proposal presented to stakeholders

COVID-19

Addressing uncertainty and measuring impacts

Stakeholder workshop
2021 – 2026 regulatory reset

The pandemic and our proposal

Many of our expenditure forecasts are sensitive to performance of the general economy. In particular gross state product (GSP) and population forecasts feed into:

Energy & Demand

Commercial load is driven by economic activity while residential load is mainly driven by population.

However, the pandemic has resulted in higher residential use despite no change in population suggesting a structural shift in energy usage

Connections

Mostly driven by dwellings growth that is correlated to population growth.

- **Small connections** are typically driven by population growth
- **Large connections** are driven by economic activity, as well as construction activity, especially government infrastructure investment

Solar Connections

Largely indifferent to GSP and population forecasts and heavily dependent on the extent of government incentives and energy prices

Understanding risk

- We operate under a revenue cap whereby forecasting risk is carried by us, not customers
- This simply means should the pandemic impacts be less than anticipated, our costs will increase but our revenues will not. The converse is true if the impact of the pandemic is worse

Reducing impact on customers

We have implemented and extended the network relief package

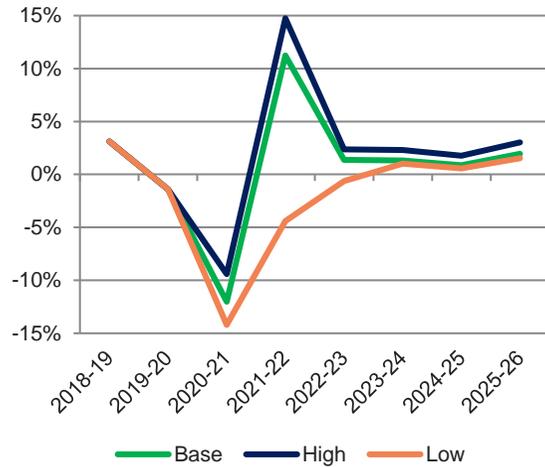
- Victorian households and small businesses impacted by the COVID-19 environment can have **electricity network charges deferred** if they have been adversely impacted by the crisis
- The network relief packages are provided by all Victorian distributors and applies **till January 2021**
- The package aligns with the Australian Energy Market Commission's (AEMC) final determination and is **approved by the Essential Services Commission of Victoria**
- The package applies to **households and small businesses** on a COVID-19 customer arrangement, payment plan, hardship arrangement or deferred debt arrangement with certain energy retailers
- From April to June 2020, our deferrals account for 9% of residential charges in arrears and we have written-off 15% of total small business support provided by retailers

Continuing to deliver safe and reliable electricity supply, with changes to how we interact with our customers and plan outages

- Reducing face-to-face interactions with customers, to minimise risk of infection of either party
- Developed stringent new protocols when visiting the site of a customer is in self-isolation
- Investing additional time and resource into minimising the impact on planned outages, by:
 - moving times to better suit the customer
 - increasing communications around planned outages, including how best to prepare for the outage

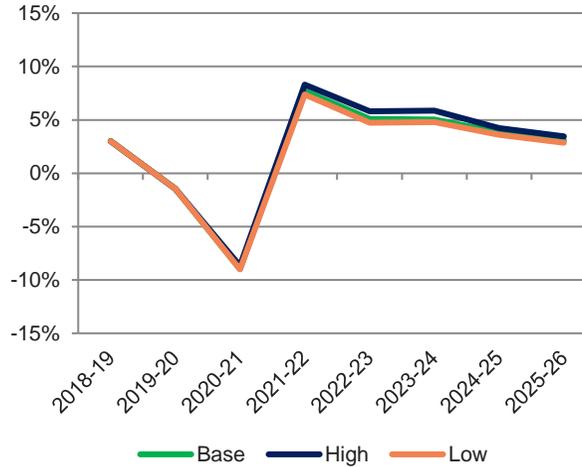
Victorian Gross State Product forecasts

Forecaster A



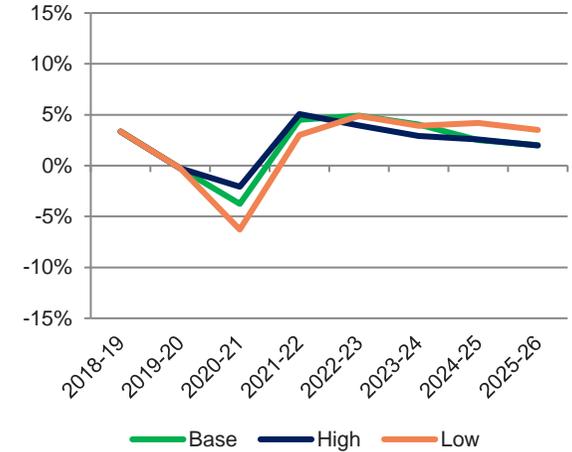
Average	Base	High	Low
2020-2026	0.8%	2.5%	-2.7%

Forecaster B



Average	Base	High	Low
2020-2026	2.6%	3.2%	2.4%

Forecaster C

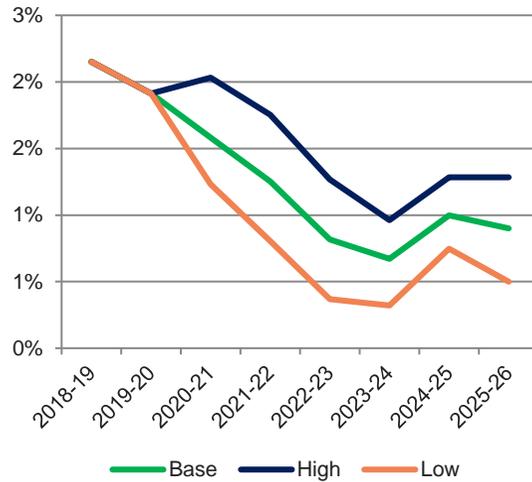


Average	Base	High	Low
2020-2026	2.4%	2.4%	2.2%

- We have obtained GSP scenario modelling from three different forecasters, each with their own definitions of possible or likely scenarios. The modelling was conducted during stage 4 lockdowns
- Key assumptions into scenarios include the duration of lockdown, its impact on the economy as offset by government support, and the duration of border closures
- The variations between forecasters and within scenario modeling reflect the uncertainty we are facing

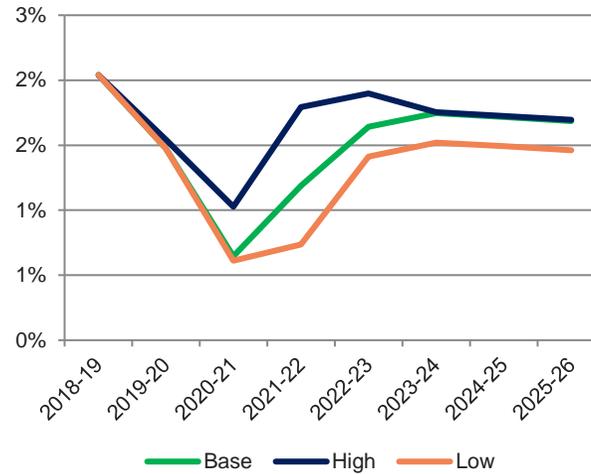
Victorian population forecasts

Forecaster A



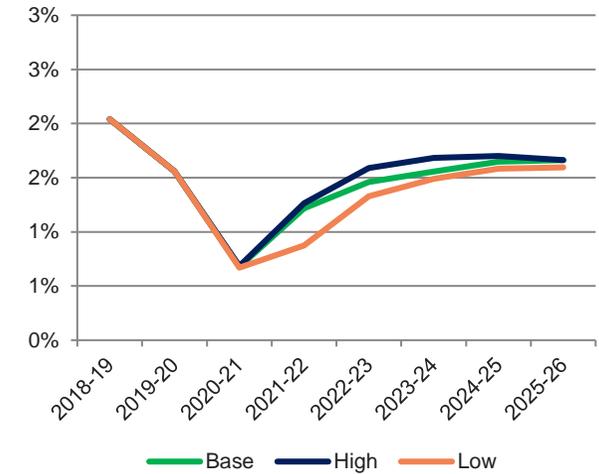
Average	Base	High	Low
2020-2026	1.0%	1.4%	0.7%

Forecaster B



Average	Base	High	Low
2021-2026	1.4%	1.6%	1.2%

Forecaster C

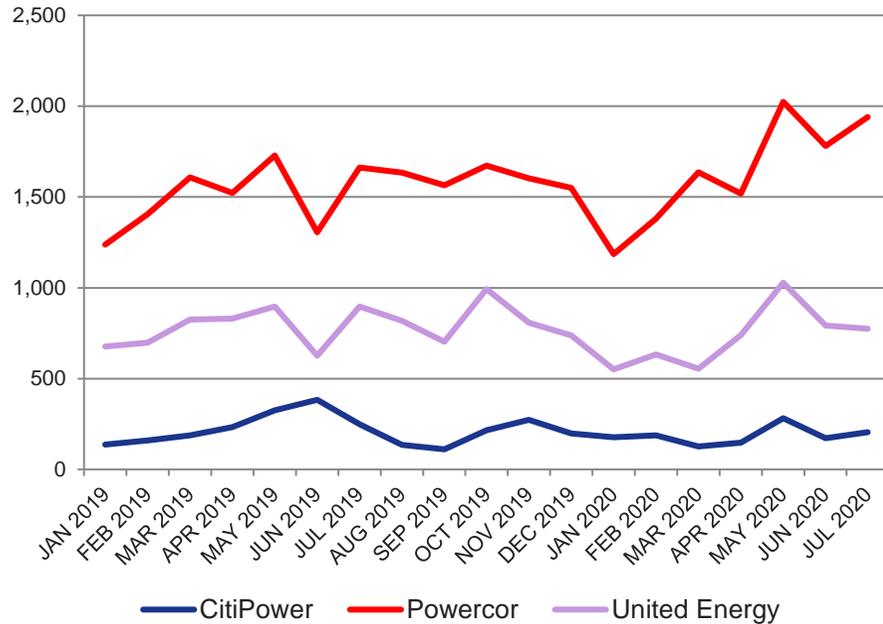


Average	Base	High	Low
2021-2026	1.4%	1.4%	1.3%

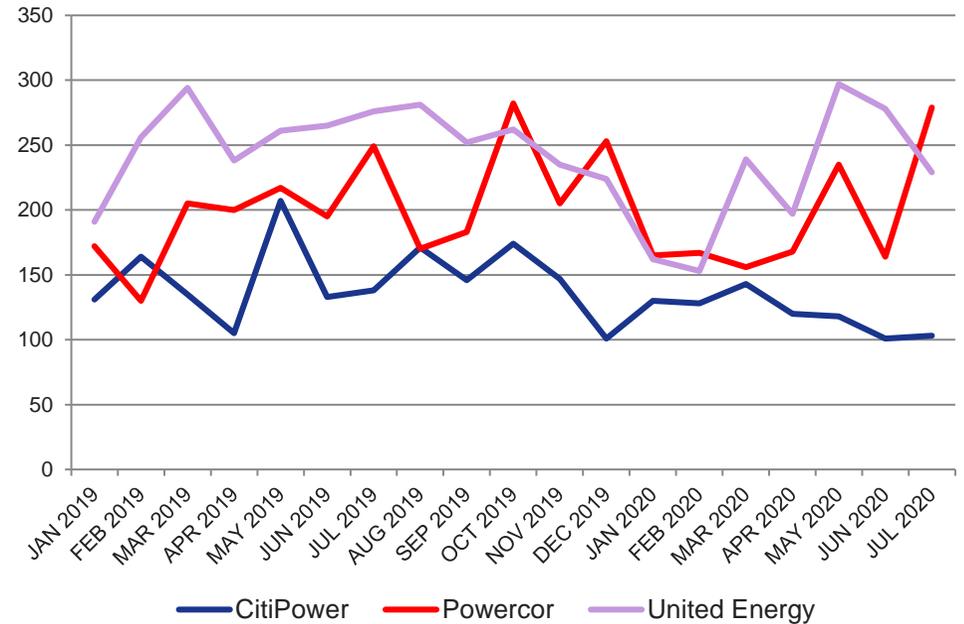
- Similarly to GSP forecasts, we have obtained population scenario modelling from three different forecasters, each with their own definitions of possible or likely scenarios. The modelling was conducted during stage 4 lockdowns
- Key assumptions into scenarios include the duration of lockdown, and its impact on interstate migration and immigration
- Population is a proxy for the number of dwellings, however dwellings are also impacted by construction activity and the average size of a dwelling

Connections remain strong

Residential connections per month

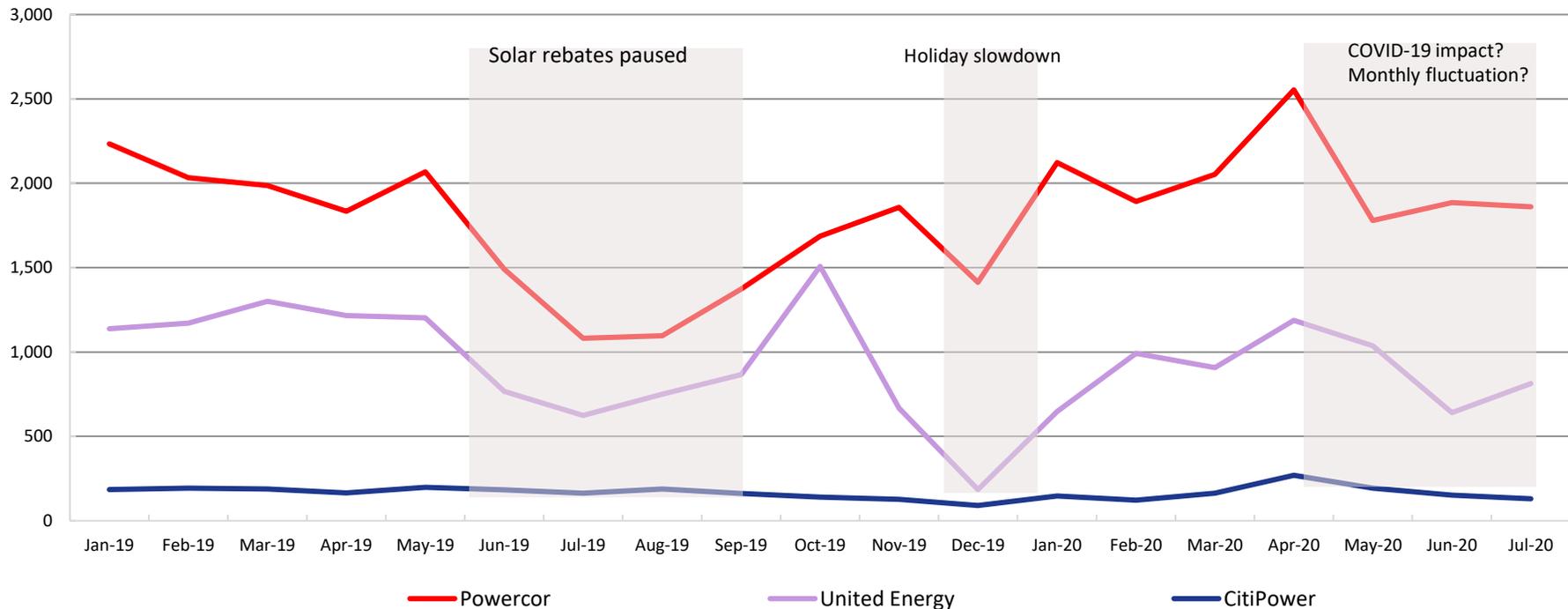


Non-residential connections per month



1. Powercor residential connections in 2020 are tracking above volumes in 2019 while United Energy and CitiPower volumes are slightly lower
2. For non-residential connections, Powercor 2020 volumes are broadly consistent with 2020 and CitiPower and United Energy are slightly lower

Solar PV connections

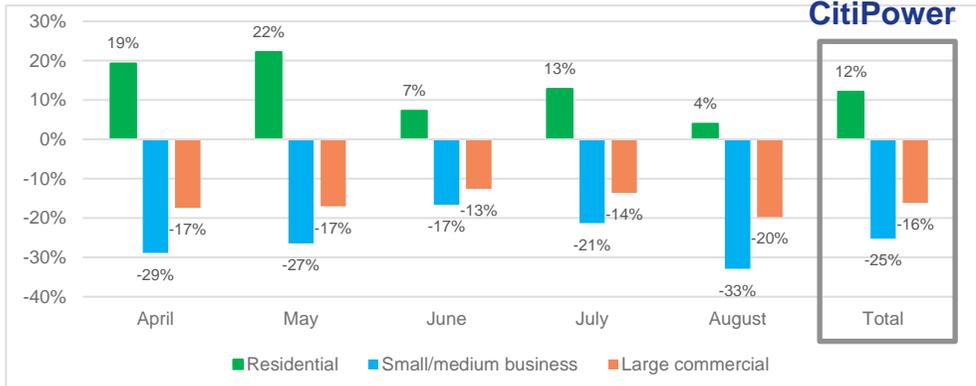


- Victorian Government Solar Homes program is underpinning solar investment
- To date, monthly solar installations are slightly above the 18 month trend for Powercor (1860 compared to 1805) and slightly below trend for United Energy (812 compared to 927) and CitiPower (130 compared to 165)

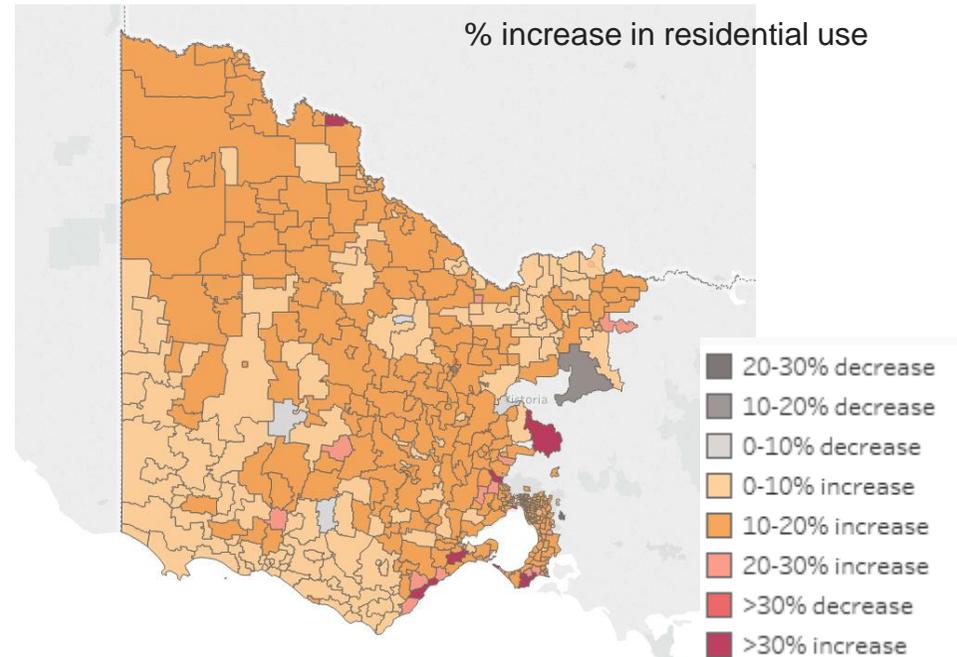
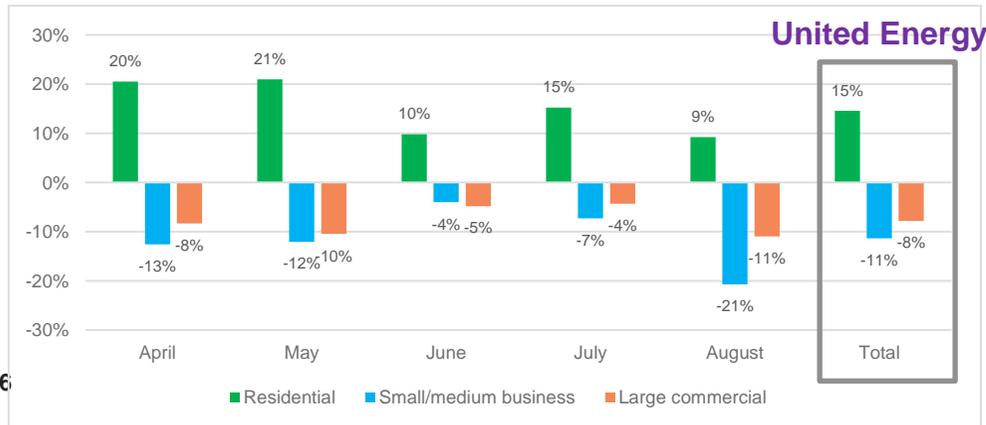
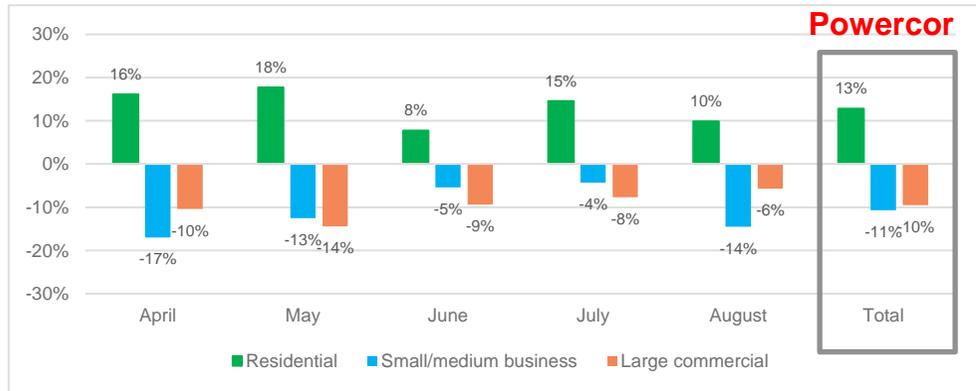
Customers are interested in solar due to:

1. Quicker payback because of working from home
2. More time to consider home improvements
3. Seeking more control in times of uncertainty

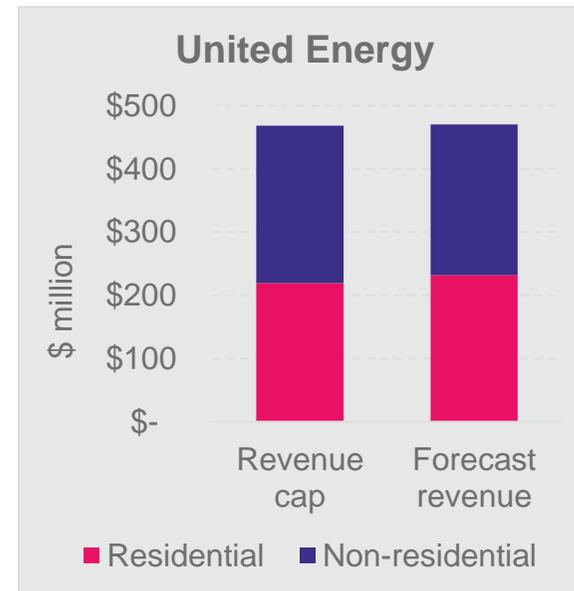
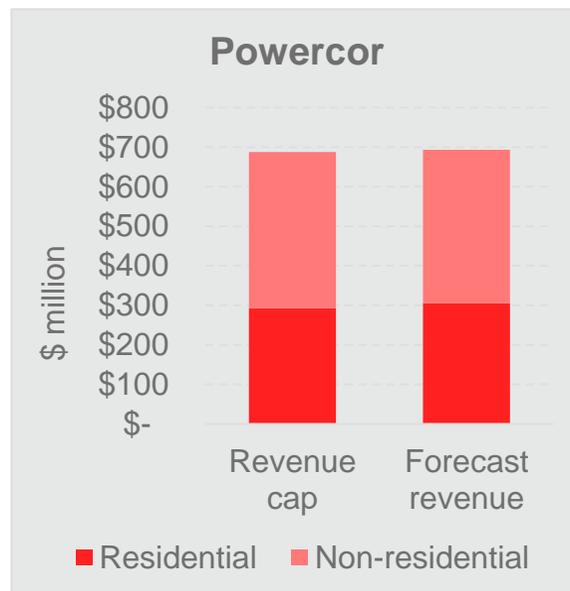
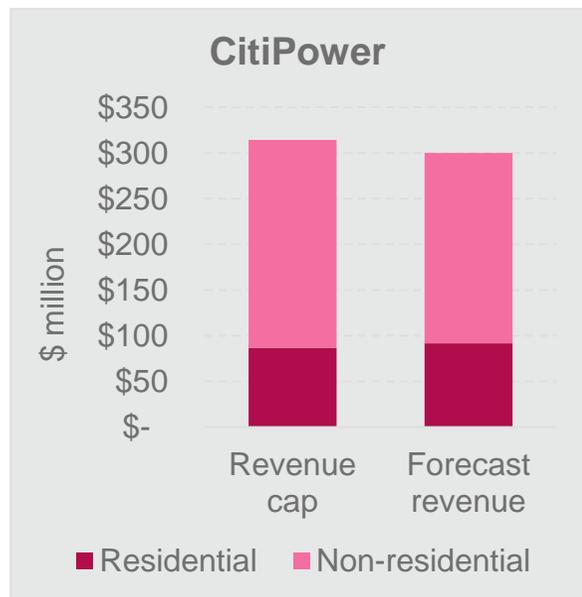
Changing electricity use



- Across the three networks, electricity usage from the residential sector has increased while the small business and large commercial sector usage has fallen since March 2020
- For Powercor and United Energy, the trade off has resulted in similar electricity usage overall while for CitiPower usages has fallen in total



Revenue Forecasts for 2020



- We operate under a revenue cap – we set prices for each year based on estimates of electricity usage by different customer types. For each under-recovery (less revenue than the cap) or over-recovery (more revenue than the cap), the adjustment is added, or subtracted from, the revenue two years later
- Using actual data to date, we forecast our revenue for 2020 to be slightly higher than the cap for Powercor (1%) and United Energy (0.6%), and lower for CitiPower (-4.9%)
- To reduce price shock to CitiPower customers, we propose to spread the under-recovered revenues over the five years from 2022 to 2027, rather than recover it all in 2022

Contact Us

Asia Pacific

Level 5 550 Bourke St
Melbourne VIC 3000
AUSTRALIA
+ 61 3 9614 3000

North America

Level 5 400 Madison Avenue
New York NY 10017
USA
+1 929 239 3080

www.forethought.com.au