



## **Commercial and Industrial Customer In-Depth Interviews (Round 1):**

**Report on key findings**

**July 2018**

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## Executive Summary

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This report outlines the findings of *Commercial and Industrial Customer Interviews (Round 1)* undertaken in Phase 3 of the CPPCUE's Energised 2021-2025 engagement and research program. It highlights the viewpoints and opinions of large energy users, in this case, customers drawn from the Powercor network. A second round of in-depth interviews will elicit the views of commercial and industrial (C & I) customers in the CitiPower and United Energy networks and select leaders of business and industry associations.

*Themes and topics addressed in these interviews span:* customers' preferred energy future and top of mind issues; their views on network development, renewable energy and funding options; capital investment in the network and the distributor's value propositions for 2025. Other topics in focus include connection timeframes and processes (for green field sites), energy reliability and quality, safety, tariffs and pricing and the distributors' future roles, communication and collaboration with customers.

### Customers' preferred energy future

Customers' preferred energy future was typically described as a steady and progressive integration of renewable energy options to their energy mix, rather than game changing energy scenarios. Strong aspirations but 'steady' views on the pace of change were evident. The scale of industrial manufacturing undertaken by these C & I customers and their requirement for base load energy has sealed their commitment to the grid as a primary energy source for at least 10 to 20 years. The customers interviewed had little (e.g. 1% or less) of their current energy capacity supplied by solar or other renewables right now. However, all had a vision of a smarter grid and some were planning further onsite renewables and investments in long term solar, wind or hydro-electric energy sources.

### Flexible grid and sensible investment

A more flexible grid that enables more renewable energy plants to connect is sought. Most customers want and need large renewable energy sources to be connected to the grid to lift energy capacity constraints that inhibit growth. Avoiding the temptation to 'gold plate' the network was a key priority for customers. They want distributors to look at the "return on network investment for their customers or clients, not just their own internal return on investment" and to pursue new technologies or infrastructure that improves the overall reliability of the network. Most felt that spreading the cost of network augmentation to facilitate connections for large scale renewable across all customers made sense.

### Customer value propositions for 2025

In line with other CPPCUE research to support the Energised 2021-2025 program, the distributors' nine key value propositions for 2025 (see Appendix B) were also discussed in these in-depth interviews with large C & I customers. Not surprisingly, the value propositions of highest importance to these large energy users were 'maintaining affordability', 'using electricity when you want or receiving savings for reducing use' and 'providing a reliable supply of electricity'.

These same themes were captured in customers' top of mind recall and discussion of current energy issues and opportunities. The affordability and flexibility of tariffs is top of mind alongside the impact of outages and variations in power quality. Customers are seeking more interaction with Powercor (and their retailers)

about their energy costs, new tariff options and demand response options to lower their energy outlay. A similarly high priority is placed on ‘providing a reliable supply of electricity’. For large C & I customers, a key indicator in evaluating whether the distributor has delivered on this value proposition is its success in reducing the frequency of short outages that disrupt production lines. In this context, customers are thirsty for data - not just consumption data which they already monitor, but also network history on outages. Customers spoke of losses ranging from \$100k-200k to hundreds of thousands of dollars as a result of frequent, low level variations in power quality. The urgency of gaining access to accurate and timely data on quality and reliability has intensified in the lead-up to REFCL installations (with impacts yet to be tested).

### Connection timeframes and process

The connection experiences of these C & I customers were not extensive. However, most interviewees had a high level of awareness that a long lead time was likely for green field connections. Most interviewees were well aware that there were some issues and constraints in arranging connections, but long timeframes for business case development and project roll-out were the norm for these customers who oversee multi-site operations. However, having a fast track, user pays option for connections was welcomed. Having the option of sourcing and using your own third party contractor for preliminary electrical work was also viewed favourably. The only proviso, mentioned by one customer, was that third party contractors are accredited and communication and follow-up requirements with distributors are regulated.

### Energy reliability and quality

For most C & I customers, major outages are high impact, infrequent events. Communication protocols need tightening up around these outages to keep customers informed, but the area of greatest need is managing small, but frequent quality fluctuations. In dairy and food production lines, a minor ‘blip’ has far reaching impacts, with hundreds of thousands of dollars in waste and lost production. In the last 18 months, several customers have seen lower than usual levels of power quality and some have been working closely with Powercor to solve these issues i.e. tightening up the lines between these customers and the adjoining network. Other suggested investments to mitigate reliability issues were static bar generators or liquid battery systems that stabilise electricity at the end of lines (used in Western Australia).

### Safety of the network and surrounding environment

Most customers were satisfied with the overall safety of the network. Maintaining the safety of the network and proactively monitoring and replacing assets was viewed as the network’s core business. Undergrounding of power lines was viewed favourably, but balancing the costs alongside safety and visual benefits was seen as important. Most interviewees said that they felt ill-equipped to comment on whether the REFCLs should be operated either side of high fire days or only on total fire ban days. A cost-benefit analysis was recommended in light of the potential cost implications that could arise for large energy users.

### Pricing – current and future perspectives

In considering their current tariff arrangements, one or two customers said they were acceptable; some were dissatisfied and most were interested in a review process that looked at their network tariffs and retailer tariffs to see how their current energy costs could be reduced. In general, customers are seeking tariff flexibility and affordability – a focus on annualised costs versus demand responsive tariffs underpinned their

concerns. The timeliness of tariff reviews was a concern for some customers. One interviewee said that customers didn't want another 12 months of analysis before a decision is made.

The majority of C & I customers welcomed peak pricing signals from the distributor to adjust their energy usage (potentially dropping 1 to 60 megawatts) to receive rebates. However, for some customers, the size and scale of plants/facilities would require this to be an 'ongoing demand response option' (to pursue or decline in line with operational conditions). Critical peak pricing is difficult for large scale facilities and manufacturing operations to achieve. However, most C & I customers were keen to further investigate their ability to drop power during peak times, the megawatts they could shed and related cost savings.

### **The distributor's future role, communication and collaboration**

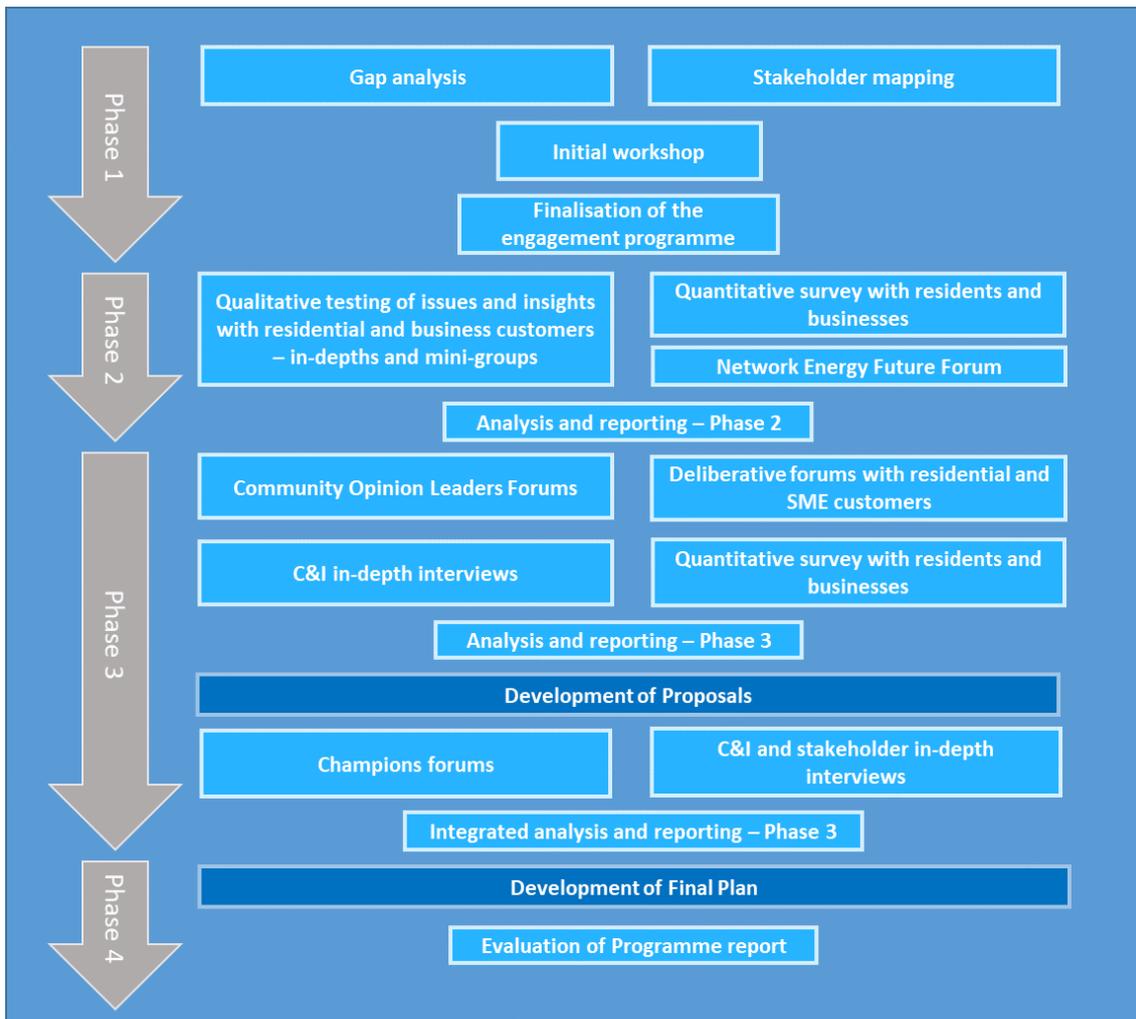
A suite of suggestions were made with regard to the distributor's future role. These included: assisting customers to connect renewable energy and export and trade energy, grid-wide monitoring of energy performance and data analytics (with related consulting services), support for local micro grids or networks that only connect to the main network at certain times and further leveraging of digital and smart metering technology. Large C & I customers also want distributors to engage in more frequent dialogues and planning meetings, establish clearer protocols for communication during outages and quality incidents and co-develop more flexible and affordable tariff structures and demand response programs.

## 1.0 Introduction

This report discusses the key outcomes of *Commercial and Industrial Customer Interviews (Round 1)* conducted in June, 2018 to inform CitiPower, Powercor and United Energy’s (CPPCUE) planning for the 2021-2025 regulatory period. All network distributors are required to submit regulatory proposals to the Australian Energy Regulator (AER) every five years, detailing their predicted expenditure and revenue requirements.

The Energised 2021-2025 engagement and research program supports the development of CPPCUE’s regulatory submissions. These in-depth interviews with commercial and industrial customers are seated within Phase 3 of the program. Findings will inform the design of Champions Forums in this same engagement phase and the subsequent development of CPPCUE’s draft plan.

Figure 1: Research and engagement activities supporting Energised 2021-2025



## 2.0 Method

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Two rounds of in-depth interviews with large commercial and industrial (C&I) customers are occurring in Phase 3. Outcomes of *Commercial and Industrial Customer Interviews (Round 1)* discussed in this report are based on interviews of 30-40 minutes duration with eight (8) organisations who represent Powercor's largest energy users. Round 2 interviews will include a further suite of C & I customers recruited from the CitiPower and United Energy networks plus select leaders of business and industry associations.

### 2.1 Customer recruitment

For this first round of interviews, a sample list of seventeen (17) C&I customers was developed by CPPCUE drawing on its database of large energy users. Subsequently, eight (8) energy decision makers from customer organisations in the Powercor network were recruited. Participating companies operate in diverse industries with different energy needs and patterns of energy use. Sectors include: heavy industry/manufacturing (e.g. steel, oil and gas), mining, food processing and manufacture (e.g. milk/dairy, confectionary, meat and small goods), water distribution and higher education.

The executives and managers serving as interviewees oversee medium to very large operations providing products or services to a large marketplace, in some cases, extending to other Australian territories and offshore. A mix of publicly listed companies (some who had experienced take-overs and liquidation phases) were represented with all interviewees outlining substantial energy usage and related impacts of energy on their business operations and 'bottom line'.

For organisations with multi-region interests, the focus of the discussion was only on their Victorian plants and facilities, all of which were serviced by the Powercor network. Only one of the interviewees had business operations in more than one network in the CPPCUE group and in that case, Powercor and United Energy were involved.

The interviewees' role or job within their organisations ranged from general management (e.g. planning, operations, infrastructure, facilities and services) through to strategic sourcing of energy and water and related procurement. In some cases, the manager served as an 'integrator' of these inputs to the business and used an internal procurement group (e.g. university business unit) or an external procurement agency to plan, cost and acquire their short and long term energy supply.

Woolcott Research and Engagement liaised with nominated company representatives to arrange suitable interview times, with some appointments rescheduled to accommodate the involvement of busy executives. The project timeframe for Round 1 interviews was marginally extended to enable some key customers to participate.

A de-identified profile of the participating organisations and their key activities that absorb energy and patterns of use is provided in Table 1 below to contextualise the findings outlined in this report.

Table 1 – Organisational types involved in C&I Customer Interviews (Round 1)

Sector or industry	Facility types and activities	Pattern of energy consumption
1. Heavy industrial manufacture - metal refinement and production	Metal refinement, production of wire and tubing (industrial plant)	Constant production, flat load across multiple shifts, major shut down in December/January only
2. Mining - rock crushing, mineral processing, ingot production	Underground mining, water removal, primary and secondary ventilation, above ground rock crushing, processing and production	Mining, water pumping and primary ventilation is 24/7, 24/7 processing for 4 days, maintenance for 3 days weekly
3. Dairy product manufacture and distribution	Milk processing and dairy production across a large plant with a substantial workforce, fleet of trucks for milk delivery and dairy product distribution	18 hours per day, 5 to 7 days per week. Extended operating hours (6am to 8pm). Peak season July to December during calving season.
4. Food manufacture and distribution	Food production with highly liquid, temperature sensitive product. Complex production facilities with thousands of users of power onsite. Maintains a high base load of power to warm product.	Production over a 7 day cycle with more energy usage for cooling over summer, large parts of the plant are 24/7, reduced use over weekends (but high base load is maintained)
5. Meat, small goods, grocery manufacture	Production of 400–500 tonnes of meat product on a weekly basis, steam cooking/compressed air, extensive refrigeration, a full shift daily for cleaning of the grinders, mincers and production areas.	Two shifts plus a cleaning shift daily across a 5 acre site. Constant refrigeration. Goes from 8mw to 3.5mw in the off-shift.
6. Multi-campus university	Lighting and A/C for offices, lecture theatres, power for research labs, manufacture and test facilities, lighting of common areas, buildings and roadways	24/7 university operation with night classes and research. Essential 24/7 lighting, A/C and power for labs and manufacturing projects. Heavier use during teaching periods.
7. Regional water distributor	The organisation collects, stores, filters, disinfects and delivers water and it collects and treats wastewater.	Energy is consumed 24/7 in waste water and sewerage treatment, pumping stations and other facilities.
8. Oil and gas refinement, product manufacture and distribution	Oil refinery with related intensity of refining and processing plant (fuels, lubricants, bitumen and chemicals), pumping stations	24/7 use of energy with additional investment planned – new tank and pumping station planned, 6-8 week maintenance overhauls, large site

		with multiple operations and upgrades.
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## 2.2 Discussion topics

The success of Round 1 in-depth interviews with customers relied on a discussion guide that was tightly aligned to CPPCUE’s primary themes and questions for its 2021-25 regulatory reset. With some large customers absorbing up to 10% of network-wide energy demand, it was important to hone in on their critical energy needs and aspirations for the next regulatory period. Gaining in-depth explanations of customers’ energy needs requires a rich discussion stimulated by many follow-up questions and prompts.

Key topics in the discussion guide (see Appendix A) sought customer viewpoints on:

- Current energy issues and opportunities (and their related level of contact with the distributor)
- Their preferred energy future
- Network development, renewable energy and related funding options
- Capital investment needed to support their preferred energy future
- The distributors’ value propositions for 2025
- The connections timeframe and process (for new greenfield sites)
- Energy reliability and quality
- The safety of the network and surrounding working environment
- Energy affordability and tariff options (current and future)
- The distributor’s future roles, communication and collaboration

All interviewees were emailed the Energised 2021-2025 Value Propositions (see Appendix B) in advance so that the nine key value statements proposed for inclusion in CPPCUE regulatory proposals could be properly reviewed and discussed during the interview.

## 2.3 Data capture and analysis

To facilitate a free-flowing discussion and a detailed and accurate account of customer views and opinions, all interviews were audio-recorded. Customers were given required assurances about the confidentiality and management of interview data and related to that, our practice of de-identifying comments and opinions in final reporting.

On completion of these Round 1 in-depth interviews, each one was transcribed. This enabled the discussion with each customer to be coded and analysed within the core themes and topics. This approach delivers a rich suite of customer insights and a solid body of evidence i.e. a range of quotations for use in final reporting. Notably, the same approach to data collection and analysis will be adopted for Round 2 interviews to enable key findings from both interview rounds to be merged.

## 3.0 Key Findings

### 3.1 Customers' current energy issues and opportunities

Across the C&I customers, the affordability of energy was a top of mind issue alongside the impact of outages and variations in power quality. High electricity costs and avenues to improve their bottom line were in focus for several operators, particularly multi-state operators who noted that energy prices in Victoria had tripled. As a result, finding ways to make energy more affordable is a key driver of interest in the network and retail tariff reviews and demand management.

For some customers who have experienced business difficulties or recent organisational changes, a sense of urgency was attached to reductions in electricity prices, network tariffs and/or reductions in energy usage.

*"We've gone from a situation going back ten years or more where increasing networks costs were the main driver of our increasing electricity costs to now where network costs have been largely overtaken by the cost of energy itself."*

However, reliability was given equivalent, if not higher importance, by some customers in their opening comments. Unexpected costs or losses linked to energy outages or quality variations were highlighted with the scale of impact rising in line with the length of the outage and customers' hourly operating costs. Customers spoke of losses ranging from \$100k-200k to hundreds of thousands of dollars in lost production as a result of low level variations in power quality.

Most customers were therefore thirsty for energy data - not consumption data which they already monitor closely, but rather, the background history to outages (when, where and why they've occurred). This background data is seen as essential for large customers to understand how they can work with Powercor to 'harden' or 'tighten up' the assets or systems that are root causes of outages or continuous 'blips' in quality. The latter has a significant impact on C&I customer operations, sometimes causing major waste and re-runs of production. The urgency of gaining access to accurate and timely data on the quality of electricity has only intensified in the lead-up to REFCL installations which may have further adverse impacts on large processing plants/factories.

The level and frequency of Powercor's communication with most interviewees was limited. Communication has either occurred (1) on an 'as needs basis' linked to outages, (2) to remedy a high impact problem e.g. frequent quality 'blips', (3) to prepare for REFCL installations and reduce their electricity reliance, and/or (4) to discuss their future renewable energy options. One or two customers had semi-regular liaison with Powercor's manager of large customers to talk about strategic matters and key projects. Most saw value in having a higher level of interaction with their distributor to optimise their energy outcomes.

Some customers wanted improved communication protocols to address outages and power quality issues. This was especially the case among those who had suffered lengthy outages and lost significant dollars in downtime. One or two very large customers said there had been occasions where they had struggled to reach Powercor personnel to understand what was happening during an outage e.g. "The mill had been shut down

and we had significant problems trying to contact anyone from Powercor to tell us, you know, what was happening and when power would be restored” and “I think it would be very useful to have a greater level of engagement with them.”

### 3.2 Preferred energy future

A ‘big picture’ question posed to C & I customers about their preferred energy future for 2025 did not prompt descriptions of game changing energy scenarios. Instead, most referred to a steady and progressive integration of renewable energy options to their electricity supply. Related comments were:

*“Within the electricity space, there’s obviously an option to look at increasing renewable generation and potentially solar, but I can’t see solar energy’s going to make a significant dent in our requirements...there’s options to contract renewables, a hedging type arrangement, but in terms of physical supply, I can’t see that playing a big part.”*

*“The mix of where we get electricity from might change a bit. We’ll have more renewable generation that needs to blend in, but we will only have solar or wind or whatever for internal use. We’ll still need significant base load energy coming through ...but we’ve got constraints at the moment on these feeders that we can’t go over because there’s not enough supply...we want a bit more unconstrained supply to expand as we need to.”*

Several customers profiled their current or planned contractual arrangements or agreements with large renewable energy plants. Reference was made to “power purchase agreements and going straight to wind farms to do a financial take on that” and “investing in solar farms up in northern Victoria and using a PPA, like a 10 year agreement, to capture large generation certificates that can be used to offset our emissions.”

In general, customers who spoke about the energy future for their business over the next seven years to 2025 did so in a measured way. Strong aspirations but ‘steady’ views on the pace of change were evident in ‘what they’d like to see more of’ and by default ‘what they wanted to see less of’ from their distributor.

#### Looking ahead, customers want to see:

- **Cheaper power, one-on-one tariff reviews with the distributor and more demand response options** – Customers are seeking more interaction with Powercor (and their retailers) about their energy costs, new tariff options and demand response options to lower their energy outlay. Joint discussions that involve distributors and retailers were sought by these very large energy users.

*“We need to secure reliable, low cost energy – network costs are 50%. They need to work to lower that to keep industry in this country... they need to keep costs down, not add costs in.”*

*“We’re going to be looking at purchasing agreements and on-site renewable energy. There’s going to have to be better tariff considerations to take that into account. They’ve got it for the smaller end, but for the large ones, we can use that for peak load reduction and peak demand tariff reduction to lop that top bit off.”*

*“Demand response has been around for 40 years. It’s never worked particularly well and whether we’re a demand response provider or a recipient of it, it’s in both our interests.”*

- **More collaboration with large customers on their renewable energy plans** – Customers want Powercor to play a role in helping them to better understand how to connect renewable energy and use battery storage. Almost all customers planned to bring more solar or ‘behind the meter’ solutions into their energy mix for cost and reliability reasons.

*“They need to work with large users on battery technologies and solar and their use...they should be looking to work with large scale customers to try to manage the network better.”*

*“We’ve signed a 20 year agreement with a solar farm in the Powercor network and its highly valuable for us...it’s secure and can deliver power to the grids reliably. That is a risk entirely on our business and we’d like to see Powercor continue to improve their networks to ensure that renewable energy can be delivered to the grid.”*

*“How could we connect and how much would it cost....the information we required from Powercor was going to be predominantly expensive...the money they were asking us to pay in no way reflected the work they would need to do to answer our questions.”*

- **More ‘back data’ on reliability and quality issues that can help customers to work with Powercor to overcome these issues.** Some customers have sought but failed to obtain data on reliability incidents and are prepared to offer various assurances to the distributor to enable this data to be used for mutual benefit i.e. hardening up electricity assets on both sides to improve reliability.

*“That sort of data hasn’t been forthcoming in the past and it’s available in new zone substations in power quality meters, so we’ve asked for that. We’ve asked for it before and they’ve said, ‘oh, it’s not available’....but it is available and it’s a question of getting it to us.”*

*“From a smart grid perspective, we’re expecting that if there are five main high voltage feeders or medium voltage feeders coming out of its substation they should all have some form of monitoring equipment....If an outage happens or there’s something getting ready to blow then Powercor will know, let us know about it and we can ramp down, start putting product away.”*

- **More stability with power quality.** A number of customers want tangible steps taken and further assurances that quality will be improved (with little if any ‘blips’ in power supply causing downtime in major production facilities and a need to restart production lines).

*“We’re usually at the big end of a long power line and by the time the power gets to us it’s sometimes a bit ordinary and there’s a few people taking it off there. So looking ahead, we want reliability of supply when it comes to the quality perspective.”*

### 3.3 Network development, renewable energy and funding options

Customers’ current and planned use of renewable energy sources and related implications for developing a more flexible grid were explored in some depth. Most saw value in the distributor building the network to enable more large scale renewables to connect to the grid and spreading the cost of network upgrades across all customers. While large businesses would obviously benefit, most see flow-on benefits to the wider community. However, some customers felt that those exporting solar power into the grid should similarly

contribute dollars e.g. connection fees or export tariffs towards technologies that manage related impacts on energy quality.

The customers interviewed had little (e.g. 1% or less) of their current energy capacity supplied by solar or other renewables right now. All customers had a vision of a smarter grid and were planning to increase the use of renewable energy sources across their operations. However, those that quantified the likely proportion of energy to be supplied by renewables in 2025 referred to ranges of 5-10% and 14-20% of energy being sourced from physical 'onsite' renewables. None of those interviewed referred to a more significant transition to renewables in the next regulatory period, given their need to maintain a significant base load of energy to run their operations.

Storing and reabsorbing solar, wind or hydro-generated energy was envisaged, but only a couple of those interviewed planned to export energy back to the grid. For others, manufacturing food, steel or other products was seen as the customer's core business, not producing power. Most had cost efficiency aspirations with a typical comment being "we want to get our main energy costs down, but I don't think we'd ever get to the stage where we'd have enough volume to put back into the grid."

Offsetting emissions was a high priority for some interviewees, particularly those in mining and heavy industrial manufacturing. In these cases, investing in renewable energy projects to gain the benefit of large generation certificates is vital, but some also rely on grid connection of large scale renewables in the Powercor region to maximise their success. One customer's investigation to build an on-site solar farm and another customer's 20 year agreement to build and draw power from a regional solar facility illustrate this medium to long-term integration of renewables.

Customers are already pursuing various small scale sustainable energy options including in one case, a 'waste to energy project' e.g. using a bio-digester to get rid of meat and in another, a mini-hydroelectric scheme that is exporting to the grid. However, it was noted that the benefits of storing and exporting this energy are limited so far - "financial returns are quite low and we don't get any environmental credits or benefits from these schemes."

The scale of manufacturing and related energy consumption of these large C & I customers sees them committed to the grid as a main source of energy for the next 10 to 20 years. Some are focused on 'behind the meter' renewable energy generation, battery storage and/or maintaining and upgrading co-gen facilities, but most see the biggest challenge for distributors being how to respond to a "fast changing electricity generation and consumption pattern that's very different to what it was five or ten years ago". However, as one customer said, "I think it will be 2025-2030...that 10 year time horizon, if there are breakthroughs, particularly in battery technology, that will enable everyone in the whole electricity market to reduce peak demand. That will bring profound changes to distributor businesses."

### 3.4 Capital investment to support customers' preferred energy future

To facilitate their preferred energy future, customers were also asked to think about the kinds of capital investment that might be needed and whether the current risk-based approach to infrastructure replacement and augmentation should continue to guide capital investment. While some customers were quite unsure (saying they would defer to the Energy Users Association or similar), others did respond with ideas for further capital investment in the vicinity of their own plant or production facility.

*"I think the easy answer would be the supply of significant remote power lines and power supply out to our factories. If we're at the end of a long line, we'd like to see some redundancy... there's no big mains, nothing coming around and if something happens up the road that basically shuts us off...there's no supply from the other side."*

*"Something to help us ride through the quality, ride through the blip...an energy storage system at the end to stabilise the power and help us ride through that millisecond blip. If you have a static bar generator or if you have a liquid battery system there, that would stabilise the end of the line."*

More global comments about capital investment needs included:

*"There needs to be a whole heap of capital spent on the network to accommodate the new energy links....I think the first order of business is the change that the existing network will need to undergo to provide a generation mix that is less and less based on coal and more on wind and solar. So the question for policy makers is, "what does that network look like and how much could it cost us?" and "how much should it cost us?"*

Avoiding the temptation to 'gold plate' the network was emphasised by several customers. A related comment was that distributors should look at the "return on investment for their customers or clients, not just their own internal return on investment" and "this means investing in new technologies or infrastructure to improve the reliability of the network".

The overall affordability of energy, the reliability of the network and related network upgrades were all seen as influences on the success of large businesses and the likelihood of these businesses staying in Australia or moving offshore.

### 3.5 Value propositions for 2025

CPPCUE's initial suite of value propositions (see Appendix B) were tested for their perceived importance to these large customers. They were also asked to identify whether any key benefits or outcomes desired by 2025 were missing from the list. Reflecting findings of CPPCUE's recent forum research, C & I customers indicated what they saw to be the highest priorities, but also noted some value propositions that are 'givens' (potentially not adding value as such, but delivering 'business as usual'). Not surprisingly, the value propositions of particular importance to these large energy users were 'maintaining affordability', 'using electricity when you want or receiving savings for reducing use' and 'providing a reliable supply of electricity'.

Customers are also seeking more flexibility in their tariff structures. Many networks shifted to fixed tariffs for large energy users in the post-GFC period, but customers are not well served by annualised tariffs in an environment of fluctuating prices. A related comment was: “if the market has a downturn, we’re still seeing the same costs coming through...that obviously has a greater impact at a time when we can’t really afford it.” For this reason, ‘using electricity when you want or receive savings for reducing use’ also appealed to these C & I customers. As one customer said, “That’s a big one, we need different pricing options so that we can look at our usage patterns and strike the best deal on how we use our electricity.”

Emphasis was also placed on the ‘providing a reliable supply of electricity’ which for most interviewees means better management of microsecond outages that impact commercial and industrial businesses in the Powercor network. For large C & I customers, a key indicator in evaluating whether the distributor has delivered value is whether it has succeeded in reducing the frequency of short outages that disrupt production lines. In this regard, the proposition to ‘make it easier to use your energy data’ stops short of the level and type of data that large customers are seeking. They want ‘real time energy usage data’ to support their tariff-related decision making, but they are equally interested in gaining access to energy performance data so they can work collaboratively with Powercor to address reliability and quality issues.

‘Making it easier to export solar’ was not especially important for most interviewees. The majority of customers had medium to long term plans to include solar in their energy mix, but only one or two companies had plans to export power back to the grid. Most were confident that they would only ever use solar or other renewable energy sources to deliver the megawatts they need for their own plant or processing facilities. However, customers were interested in ‘accommodating more renewable generator connections’ (a statement included under the value proposition ‘making it easier to connect’). Connecting renewable energy facilities e.g. solar, wind and hydro was a very high priority for those who were already exploring direct investment in onsite renewables or investing in nearby projects.

Most saw the ability of corporates to build and connect large scale renewables as more complex than the value proposition ‘making it easier to connect’ implies. One customer said it was taking a very long time to get a connection agreement for a renewables project passed with the regulator. A small group of interviewees see ‘more renewable generator connections’ as an important pathway to address their energy usage ceiling – “We need that factored in to go above the 10 megawatt limit... if we need to pay for some of it then we need to pay for some of it.”

Across the value propositions, those that relate to safety and data security were seen to be ‘givens’ or business as usual by these customers – “Providing a safe environment just goes with saying, that’s every business and not a particular value proposition...that’s just the way you do business, that’s non-negotiable.” Similar observations were made about the inclusion of bushfire mitigation in the value propositions.

*“Obviously we don’t want bushfires and they have a higher risk of doing it and that’s inherent in their job....but it’s not like they are doing us a favour...in the end it’s going to cost money, so they’re going to justify these things.”*

Capital investment in energy infrastructure was a topic arena that was viewed as missing or overlooked in the current list of value propositions. Some customers thought that decision-making about capital investment should go beyond the age and condition of assets to the level of priority of energy users who require those assets to operate or expand. A dual focus on the age/condition of assets and the criticality of energy users was recommended i.e. the need to maintain energy reliability in critical services like hospitals and transport hubs. Among these C & I customers, suppliers of staple foods e.g. milk and dairy products also saw themselves in a 'priority category' where shutdowns have a far reaching social impact.

Another customer felt that 'a modular approach to capital investment to achieve scalability' should be captured in the distributor's value propositions. This was defined as "investment in energy infrastructure or assets that the distributor can progressively build upon to take the network to the next level of development".

### 3.6 Connections – timeframe and process

The connection experiences of these C & I customers were not extensive. Most were located on long established sites, processing plants or facilities that had been developed and upgraded over a long period. However, some did have specific plants or multi-site operations that periodically new power lines. Given that most interviewees were involved in general management and/or energy procurement, they had a high level of awareness that a long lead time was likely for green field connections. An illustrative comment was:

*"If we're planning a plant upgrade, we're talking 12 to 18 months ahead, so in terms of getting our plant organised, getting work done and getting electricity supplied. So it's not simply critical from a new connection perspective as compared to a small business that would need something done in two to three months. We don't have that requirement, but it's a longer term, larger requirement."*

Other comments were that "it's not overly quick" and "they're taking a long time to get the connection agreement processed with the regulators" and "I get why others would be concerned". However, the likelihood of achieving a connection in the context of available network capacity was a somewhat greater concern for these customers. Some referred to getting further gas fire generation into their plants to overcome their ceilings on energy use and related network capacity constraints.

One interviewee whose facilities and precincts were located in both Powercor and United Energy networks saw a marked contrast in the responsiveness of the two distributors when it comes to new connections. Powercor was seen to be more accommodating with 'people' rather than processes being the key issue.

*"United Energy is hard to deal with compared to Powercor.... I've spoken to people in the industry and they talk to people in the city who have the same feeling...a lot of issues with United Energy connecting new load or getting a response back."*

For these customers, 'making it easier to connect' large scale renewables was more important than new electricity connections for their own facilities or operations. Some said that an inability for large scale renewables to connect was "a risk" to their business but they also recognised that this is potentially "less to do with Powercor and more to do with the network regulator".

The cost of connecting renewables, who should fund it and whether a ‘fast track, user pays option’ should be available drew a mixed response from customers. Some noted that if you’re building in a green field area, a long way back from existing plants (or residences), then paying for that connection yourself would be an expectation. It was thought that the same principle should probably apply to large scale renewables connecting to the network. However, it was acknowledged that each of those energy renewable energy operators was paying a significant cost to benefit more than their own plant – “when you upgrade part of the network, you’re upgrading it for more than one.”

Several interviewees liked the idea of a fast track option for new connections, noting that “If you want something quicker, you pay more” and ‘we would be interested, but some projects can be on a pretty critical timeframe because we’re responding to drought or some sort of emergency issue”. However, for most large energy users, the need to factor in less or more time to achieve a connection is simply part of preparing the overall business case.

*“You’ve got a new power line or undergrounding or running new cable down...it’s a significant investment. If we’re going to pay \$4 million for a new high voltage power line to come down, then if we have to pay 5 million to make it three weeks quicker, then we’ll evaluate that....I’m sure it’s useful for some people, but they’d be small businesses or residential developers. From our perspective as a large user, it’s almost irrelevant.”*

Having the option of sourcing and using your own third party contractor for preliminary electrical work was viewed favourably – “that’s probably a good idea. Powercor contract most of that out anyway.” The only proviso, mentioned by one customer, was that third party contractors are “accredited and there’s communication. We’ve had instances [in New South Wales] where electricians who are accredited have done work and have been lax in reporting back to the distributor. Things go slowly, there’s paperwork missing or the connections don’t work or someone hasn’t taken care of something. There’s got to be regulations on that as well.”

### 3.7 Energy reliability and quality

Customers’ perceptions of fluctuating energy reliability and quality and their desire for the network to invest in improvements were a dominant topic. That said the major issue was the frequent occurrence of minor, ongoing fluctuations in quality, not extended outages. Major outages with multiple hours of downtime were mentioned for their substantial one-off impact on the bottom line and there is a perceived need for Powercor to tighten up its communication protocols in the context of outages. The comment below was made in relation to an 18 hour stoppage in early 2018 that resulted in major financial losses. It occurred over a weekend and the customer struggled to find someone to speak to at Powercor.

*“That [outage] had a very material impact on our business...and I think the responsiveness that we saw from Powercor in those circumstances was not what we would hope. I’d like to get in place a communication protocol where if there is an unexpected outage like the one we saw in March, that you know, we’ve got a contact who knows what’s happening.”*

Communication around outages was an issue for more than one customer. Another customer said: “We had to make a call. We don’t get any feedback from those guys if we have an interruption of power.” Importantly, the impact of a sudden, unplanned outage on some of these major customers extends not only leads to financial losses, but can also compromise the safety of workers. For a mining operation, an outage means that: “all air stops circulating underground so people don’t have any air to breathe...we have to stop mining and get everybody out to the surface. Our plant just shuts dead.”

However, for most C & I customers, major outages are high impact, infrequent events. Communication protocols need tightening up, but the area of greatest need for most customers was managing small, but frequent quality fluctuations. In dairy and food production lines, a minor ‘blip’ has far reaching impacts. A related comment was: “we want [Powercor] to recognise that a very small outage or minor dip that’s a microsecond can take our plant out for six hours. We have to stop everything, dump a 100,000 litres of milk, clean production lines, then ramp up and start again.”

In the last 18 months, several customers have seen lower than usual levels of power quality and some have been working closely with Powercor to solve these issues. One large food producer has now achieved some stability after experiencing many quality ‘blips’ and “hundreds of thousands of dollars’ worth of destroyed product”. Another food producer had about 15 minor outages but things have improved since “Powercor reviewed their systems i.e. “the lines between us and the distribution network.” Co-gen solutions have been used by some customers to stabilise power quality. However, some are concerned about whether they will see a new level of instability when REFCLs are installed – “I’d be interested to see what happens and whether we’re going to get more ‘trips’ or not.”

The C & I customers involved in food production acknowledged that investments in network reliability are “a risk based approach”. However, they also said the network should factor in the sensitivity and criticality of their product to the public compared to some other areas of manufacturing. Most saw opportunities to work with the distributor to improve the reliability of their operations – “Powercor needs to harden their side a bit; we need to harden our side a bit.” Customers are holding out for more accurate data on reliability incidents to find out where to focus their attention i.e. “what is the strongest or weakest point?” Recommended capital investments to counteract reliability issues were static bar generators or liquid battery systems that stabilise electricity at the end of power lines (used in Western Australia).

### 3.8 Safety of the network and working environment

Most customers were satisfied with the overall safety of the network. Maintaining the safety of the network and proactively monitoring and replacing assets was viewed as the network’s core business. However, customers understand that additional undergrounding is an option (versus a necessity) along with the proposed fast track of these works. Undergrounding of power lines was viewed favourably, but balancing the costs alongside safety and visual benefits was also seen as important.

*“It really comes down to a bit of cost-benefit analysis on some of that.”*

*“Yes, it depends on the cost....it’s beneficial to fast track but it has to be balanced with the cost.”*

In summing up the ‘pros and cons’, one customer said, “I would mention that all new works should be underground as much as possible, but when you’re going back and undergrounding older infrastructure, somebody’s got to pay for that.” Several interviewees felt that the 2040 target for undergrounding was about right, but a proviso of one customer was – “I think that 2040 is reasonable, but they have to invest in more research and finding new technologies which can bring down the order of costs...I’m not sure how much research they are doing.”

The operation of REFCLs was also discussed with customers. Some had already heard about REFCLs and had their energy capacity dropped and were now working hard to widen their energy options at plants/facilities. Others had not heard of REFCLs and were slightly alarmed that they could see further reliability or quality issues. The customer requested that someone from Powercor provides them with more information about REFCLs so they can better understand their position.

Most interviewees said that they felt ill-equipped to comment on whether the REFCLs should be operated either side of high fire days or only on the designated high fire days.

*“That’s somebody who lives and dies by weather reports and works in the Powercor office and looks at risk factors....better to ask somebody who’s got up to date information.”*

*“Again it’s the risk versus the benefits....I mean during bushfire days it’s going to be high temperature and high winds. If there’s a high wind consistently but the temperature is a bit lower, then there’s still potential there. So it’s the historical analysis of the data... and the back burning that’s been done there, it’s a whole complex algorithm.”*

A cost-benefit analysis was recommended to consider the pros and cons of operating either side of total fire ban days in light of the potential cost implications that could arise for large energy users.

### 3.9 Pricing: current and future perspectives

Energy costs were top of mind for most customers - these were tariff related (network and retailer tariffs), demand related and linked to losses incurred by reliability issues. All three were mentioned by customers in responding to questions about their tariffs and costs. Customers have tried to achieve cost efficiencies by ensuring that their assets and systems are energy efficient, investing in new equipment, installing co-gen as a back-up and embarking on small scale use of renewables. Comments include:

*“Going forward with new equipment will give better options as far as power consumption is concerned. I think with a holistic view, we’re looking at that more than before. Also, refrigeration...we’ve looked at how we run those – the heat side of refrigeration.”*

*“We’ve got the micro grid planned...we’re interested in demand response. We also we have regular energy audits and we’re encouraging more user awareness.”*

Customers had limited interest in fuel switching i.e. switching from gas to electricity. Most said that it depends on gas and electricity prices and both seemed to be moving upward. Some said they used a lot of gas but were now proactively replacing it with other energy alternatives - “We’ve committed to moving away

from gas by 2040 and we're trying to find solutions in the interim." Some thought Powercor could encourage customers to replace their gas usage with electricity, but there is no real incentive at present.

In considering their current tariff arrangements, one or two customers said they were acceptable; some were dissatisfied and most were interested in a review process that looked at their network tariffs and retailer tariffs to see how their current energy costs could be reduced.

*"We have time of use tariffs, but we have peak and off-peak and it's got nothing to do with how we use our power...I would like to walk up to Powercor and retailers with my typical load profile and work out a deal that fits that."*

*"At the moment, [the distributor] has got 12 months rolling demand on tariffs. We'd like to get that a bit more dynamic rather than being contrived and set in stone. We've got our power factor mostly in hand. But it's the demand resets and the ratcheted tariff structure that we'd love to get a bit more dynamic."*

*"If our market has a downturn, we're still seeing largely the same costs coming through...you know, we really can't afford it."*

Across the eight interviewees, most wanted more tariff flexibility and affordability – a focus on annualised costs versus demand responsive tariffs underpinned customers' concerns. The timeliness of tariff reviews was also a concern for some customers. One interviewee said that customers didn't want another 12 months of analysis before a decision is made (with CitiPower reportedly talking about this timeframe more than Powercor).

*"You can see what's going on and if you need a 'stat dec' to say we've put in this equipment or whatever, then you can wait one or two months for the benefit of that to see a sharp dip and then say, yes we agree, rather than saying, let's start the clock now and do 12 months of study and then we'll make a decision."*

Several customers interviewed were frustrated by their inability to secure the best possible tariff arrangements. An illustrative comment was: "We've renewed our contract for three years...a much higher rate....we're just totally at the mercy of whatever was sort of 'lumped up'. A one-on-one meeting with them [Powercor] and the retailer probably would be good. I don't think we're working together too well on that." Faced with a similar feeling of confusion, one large customer has appointed an external energy planning and procurement agency and saw value in Powercor having some contact with that consultancy to discuss future tariff arrangements.

The majority of C & I customers wanted to receive and respond to peak pricing signals provided by the distributor. However, the size and scale of plants/facilities meant that this would probably have to be an ‘ongoing option’ versus a new tariff arrangement i.e. critical peak pricing. Related comments were:

*“Our ability and willingness to use those insights will depend on circumstances at the time, because we’ve also got customers who rely on us to meet their orders....I think that’s something we’d definitely be interested in talking about.”*

*“If there’s going to be drops in production, we need to manage our workforce and we’d also need to re-route [product] to different areas which is quite significant. So 48 hours lead time is not enough for us.”*

*“Yes, that is something that our business could be interested in...we have some spare capacity and redundancy in our operations and with appropriate signals and warnings, we could certainly take that on board as an opportunity.”*

*“Yes, but a caveat would be that we’re an essential service provider...we’d always have to put the needs of the community first.”*

Several customers noted that they would have to do more analysis of areas where they could drop power, the megawatts they could shed and related cost savings before they could accurately assess their ability to respond to peak price signals. Some thought that they could need 3 days to a week’s notice to respond, while others said they could probably drop their energy usage to receive rebates within a 48 hour window.

Some, but not all, did a quick, rudimentary analysis of the likely drop in megawatts they could achieve and the savings needed to justify it. The estimate of megawatts that could be dropped during peak periods ranged from 1 megawatt through to 60 plus megawatts.

*“3.6 megawatts is our average load, it depends on how attractive it is...we could probably turn off some operations and reduce ventilation (by a megawatt) and then turn off the crushing circuit (might be 800 kW). It costs us about 500 million a month to run the place...it would have to be a quarter of a million for a day [to make it worthwhile].”*

*“Powercor know our demand levels, but we would have capacity to curtail demand in the order of 60 plus megawatts. I’m not going to get into that [dollar savings] now....that’s more for a proper discussion with Powercor.”*

*“We’re not going to be able to remove 100% of our load, but we may be able to remove 5 or 10% of our load. We would have to reschedule our processes...move them outside of the hours where they believe the peak will occur...we would have to work out the cost or loss or profit...yeah, we’d have to work out the ROI on that.”*

*“To shut down production and route the [product] elsewhere, we’re talking probably 5 to 8 megawatts. So we don’t close the plant down....we can probably shut down a couple of production lines and maybe do a megawatt.”*

Most customers were interested in, but unsure about critical peak pricing. In the short term, the ability of large to respond to peak pricing signals provides a useful test bed and one which could strengthen the distributor’s relationship with large customers.

### 3.10 The distributor’s future role, communication and collaboration

A closing question was asked about the distributor’s future role and whether customers felt that any new or additional services could be provided by them. Ultimately, most large customers see distributors redefining their role to support the needs of a fast changing electricity network and working more closely with large customers who absorb a large chunk of available energy capacity.

More frequent communication, clearer protocols for communication during outages and quality incidents and more engagement about tariff structures, demand response programs and the future grid were mooted. A suite of suggestions were made with regard to the distributor’s future role. These included.

- **Proactively working with customers on their transition to renewable energy** – assisting customers to connect renewable energy and to export and trade their stored energy – “I think there’s an opportunity to value add a bit more in that space.”
- **Providing a comprehensive monitoring service across the grid.** Grid-wide monitoring activity is expected to increase – “There is a lot of change in networks. Before they were just sending their power from the generator to customers. Now, it’s going to be more of a distributor/monitor role.”
- **Supporting Microgrids or distributed networks.** Some saw the distributor starting to support localised networks that are only connected to the main network at certain times i.e. providing a network wide optimisation service. This support would extend to business and household energy users i.e. “assisting households to have batteries and modifying their demand using a combination of their own solar or energy sources” and “working with large scale energy users to try to manage the network better.”
- **Delivering energy customer analytics.** Providing data analytics to customers was seen to be a logical flow-on from the distributor’s current role (using network-wide data to provide an advisory service) - “There’s a much better customer service and customer analytics role that could potentially be charged for, in terms of tracking and managing the quality of supply...a bit more hands-on consulting just as they’re doing now with the beginning of REFCLs.”
- **Further leveraging digital and smart metering technology.** One customer involved in essential service delivery saw an opportunity for energy distributors to leverage their expertise in smart metering to develop new partnerships. Potentially, combined water and energy services could be developed for customers based on these insights.

## Appendix A: Interview Topic Guide

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### CitiPower Powercor and United Energy Customer Insights (C&I In-Depth Interviews) – Final Version

#### INTRODUCTION

Introduce yourself; thank the participant for attending; explain the project and process:

- We work for an independent research company called Woolcott Research and Engagement
- We are doing this project on behalf of your electricity distribution company
- The purpose of the discussion is to gain insight into your priorities, values, and views on electricity issues – in particular how you use, store and generate electricity – now, and how you would like to in the future.
- This will feed into the Regulatory Reset Proposal prepared for the Australian Energy Regulator for 2021-2025

Our role is to report back on your feedback however your responses are completely confidential and anonymous. We report in an overall basis only and do not mention any specific names or personal details. We are recording the interview but that is purely for our analysis and reporting purposes and it will not be provided to the client unless requested by you.

#### BACKGROUND

Ask participant to introduce their company and tell us a little about their role in relation to electricity decision making for the company.

#### ENERGY USAGE

- How does the organisation use electricity – particular processes it uses it for?
- What is the organisation's pattern of use? E.g. use more or less at certain times of the day or year?
  - What unique needs, if any, does your organisation have with regard to when/how energy is consumed?
- Which network(s) are you connected to (CitiPower/ Powercor/ United Energy)?
- What kind of contact do you typically have with CitiPower/ Powercor/ United Energy?
- Are there issues or opportunities that you are currently addressing with [insert CitiPower/Powercor/United Energy]?
  - What is the likely impact of these issues or opportunities on your business?

## PREFERRED ENERGY FUTURE

Thinking about the future in 2025, what would you like to see more of regarding electricity distribution?

- What would you like to see less of?
- What would your preferred energy future in 2025 look like in this city or region? How would it differ to now? What would it look like for your business?
- What kinds of capital investment do you think could be needed to facilitate that future?
  - *If they engage and make comment... ask*, In general, do you think the current risk based approach (based on safety and cost efficiencies) to infrastructure replacement or augmentation is the best possible approach (replacing like for like)? Why/why not?
  - What new forms of CAPEX, if any, could be pursued to realise the future?

## VALUE PROPOSITIONS

Ask them to refer to handout on Value Propositions – explain that these have been developed by the business based on research last year and we would like to get their feedback on them

- Are these the key things that CPPCUE should be focusing on to ensure large customers such as you are satisfied?
- Is there anything missing from these priorities that CPPCUE should focus on by 2025?

## CONNECTIONS

- What impressions do you have, if any (based on your own experience /stories of others) of the timeframe and process for arranging an electricity connection with [insert distributor]?
- What are your views on introducing a fast track ‘user pays’ option for customers wanting to speed up the process for connecting to the grid?
- **Powercor/UE only** - Should customers in greenfield areas be allowed to arrange their own third party contactor to carry out electrical works that precede the final tie-in by the distributor? Why/why not?

## RELIABILITY

- What are your views on the current reliability of your electricity supply? i.e. frequency and duration of outages? Planned and unplanned?
- Is reliability acceptable or does it need to increase in some areas in your view?
  - **IF USING MULTIPLE NETWORKS:** Have you noticed any differences in the reliability of your electricity supply across the different networks? What are these differences?

- Do outages experienced currently have a small, moderate or large impact on your business?
  - How do they impact your business?

## RENEWABLES

- What is your company's current usage of renewable energy sources? E.g. solar, wind, other? Battery storage?
- Do you currently export electricity onto the grid?
- As a business, what are the current and future benefits to you of being able to store, export and potentially trade electricity with other parties?
- Are you satisfied with the quality of your power supply? i.e. surges, flickering, brownouts?
  - IF USING MULTIPLE NETWORKS: Does this vary across the network areas?
- Some large renewable energy operators e.g. wind or solar farms have difficulties connecting to the grid due to capacity issues, e.g. several operators wanting to connect in an area with limited capacity. Given the highly concentrated renewable sources in Victoria, such as wind and solar pockets, do you see benefit in building the network for potential new renewables in those areas and smearing the cost across all customers? Or should every new connecting generator pay for the cost of building that network?

## SAFETY

- What are your views on the overall safety of the electricity network? Have you experienced or noticed any safety concerns?
- Undergrounding provides full safety benefits but comes at a much higher cost. Do you see any benefit in undergrounding assets above all other less-costly options?
- **Powercor only** - Powercor must underground some high-voltage lines in hazardous bushfires areas by 2040, do you see benefit in bringing that forward at a higher cost today? Or would you prefer Powercor found less costly alternatives with some of the safety benefits of undergrounding?
- **Powercor/UE: A large part of these networks is in hazardous bushfire areas. A REFCL is a protection device that can significantly reduce the risk of powerlines starting a fire .**

**Powercor** is mandated to install numerous REFCLs across hazardous bushfire areas/**United Energy** is not mandated to install REFCLs but is considering installing two REFCLs over the next seven years.

For Powercor, REFCLs are currently regulated to operate differently on total fire ban days and other days in the Powercor area. *When in full fire-safety mode on total fire ban days, operation of REFCLs has an impact on reliability as the power is tripped off as soon as there is a fault to make sure the line does not start a fire. That can of course cause significant disruptions to businesses.*

- **Powercor only:** Given this trade-off, do you see any benefit in operating the REFCLs in the same way on either side of total fire ban days or just total fire ban days?

## PRICING

- Thinking now about pricing and tariffs, do you feel that your current energy plan and tariff structure takes account of the energy usage you described earlier? How/why?
- Have you taken any steps in order to reduce the cost of your bill?
- Thinking about your energy usage patterns, are there any new/different tariff structures that you'd like to see in future?
- As a business, do you have the capacity to respond to occasional peak pricing signals provided by your network i.e. adjust operations to take advantage of potential rebates?
  - What timeframe would you need to respond to these signals e.g. could you respond to a peak pricing signal given 48 hours prior notice?
  - If so, how many megawatts could you turn off to take advantage of a rebate?
  - What operations could you adjust?
  - If you are able to occasionally respond to these signals to achieve a rebate, is there a minimum dollar benefit you would expect to gain to adjust your operation and reduce megawatts?
- Would there be any benefits for your business in future if your tariff structure was based on critical peak pricing? *This would enable the business to adjust power usage on an ongoing basis in response to signals/advice on highest peak days at terminal stations. The introduction of these tariffs relies on future access to energy data that gives clear pricing signals.*
- In the short or long term, is your business contemplating 'fuel switching' e.g. from gas to electricity in response to rising prices? If so, is there a role for networks in helping to facilitate that or working with you on new tariff arrangements.

## FUTURE ROLE AND COLLABORATION

What do you think the role of the electricity distributor should be in 2025? Should it be the same, or, should it be somewhat different to now?

- Any new or different services you feel could be provided by energy distributors by then?
- Future role of distributors in facilitating renewable energy connections, export and trading?
- Is there potential for distributors to partner with/collaborate with organisations such as yours to deliver this future? What kind of partnerships?

## ENGAGEMENT

- Is there anything else you think CitiPower/ Powercor/ United Energy should be engaging with organisations such as yours about?

## CLOSE OF INTERVIEW

Do you have any final comments? Thank them for their time. No incentive.

## Appendix B - Value Propositions for 2025



### Value Propositions

Please choose the top 5 value propositions that you think are most important for CitiPower to focus on, and rank them 1 to 5 (1 being the most important, 5 the least).

Value Proposition	Ranking
<b>Making it easier for you to export solar and charge your battery</b> Removing network constraints; allowing you to export the solar power you generate	
<b>Making it easier for you to use your data to make informed choices</b> Providing wider access to data (for customers who allow it) will allow you to participate in new markets, including demand response and market trading Real time data should be easily accessible	
<b>Making it easier for you to connect</b> Streamline connections processes. Accommodate more renewable generator connections	
<b>Committed to providing a reliable supply of electricity</b> Our commitment is to maintain a reliable (and safe) electricity supply Explore how we can manage reliability with the update of renewables	
<b>Committed to providing a safe network that mitigates bushfire risks</b> We will continue to meet our bushfire mitigation obligations	
<b>Committed to providing a safe environment for customers and workers</b> Safety is our first priority. We continue to adopt best practices on managing safety, including the update of data and analytical tools as they become available, to manage safety risks.	
<b>Keeping your data and our network secure</b> As data availability increases, data security and managing privacy becomes of utmost importance Continue to evolve our practices to meet our obligations to securely store data	
<b>Use electricity when you want or receive savings for reducing use</b> Different pricing options to allow you to reduce your electricity costs Demand response programs that provide rebates or other incentives for reducing usage at certain times	
<b>Maintaining affordability</b> Affordability remains a priority. Initiatives that allow us to reduce costs include: <ul style="list-style-type: none"> <li>• using data analytics to minimise waste and better understand the condition of our network</li> <li>• embracing technology to make smarter network decisions</li> <li>• finding the best value contractors</li> <li>• use a mix of employees and business partners to ensure our resourcing levels are flexible</li> </ul>	

