Deep and Narrow Engagement: Rural and Regional Summit

Produced for: Powercor

June 2023

Forethought® Outcomes

Image above: Rural and Regional summit with customers of the Powercor network, and Jessica Marriner, Head of Marketing and Communication (acting General Manager, Corporate Affairs)

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Introduction

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Regulatory Reset Proposal Program

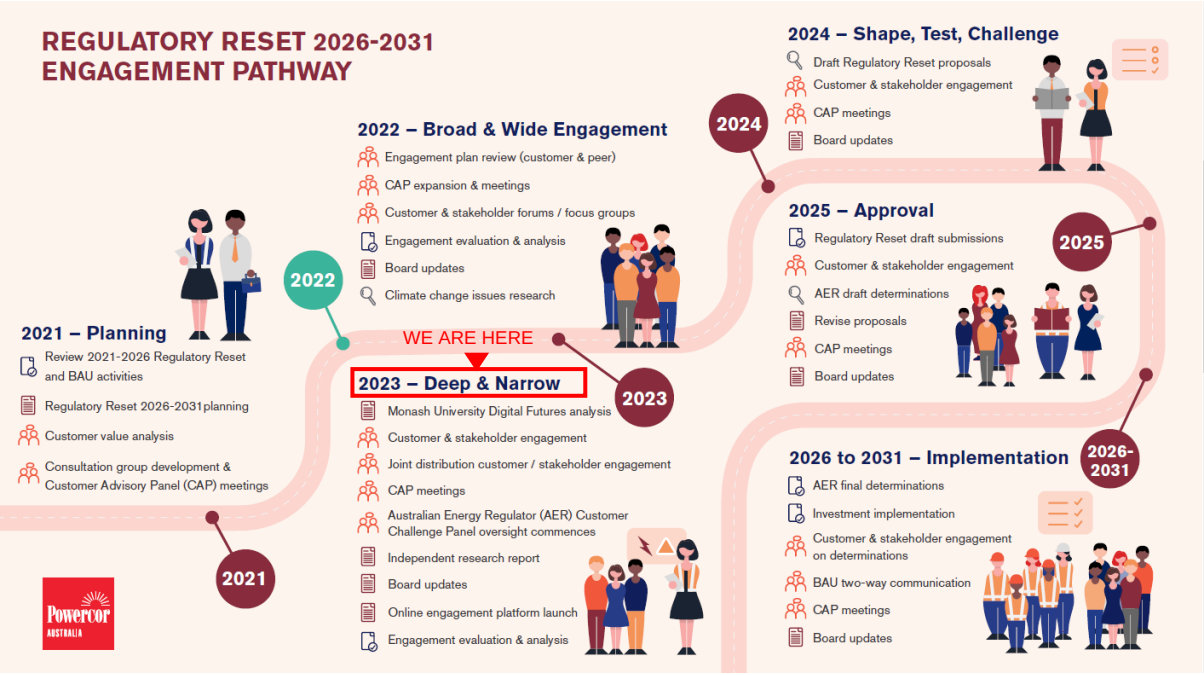
To support the development of the regulatory reset proposal, a foundational program of community engagement was conducted in 2022 and the early part of 2023. This broad and wide engagement program identified the key needs and preferences of regional and rural customers and identified four themes:

1. Affordability and equity
2. Reliability and resilience
3. Energy transformation
4. Customer experience

The deep and narrow engagement builds on this broad and exploratory research. It adopts a more targeted approach; exploring, testing, and understanding customer preferences and priorities. To achieve this outcome, hypothetical outcomes were developed by the Powercor team and discussed in depth with regional and rural customers in the June regional and rural summit.

The below graphic explains the full Regulatory Reset Engagement Pathway.

Following a detailed examination of these customer outcomes, the insights gained will guide the subsequent phases of the 2026-2031 regulatory reset proposal development. This process will involve the formulation and evaluation of business cases that align with the identified customer outcomes.



Forethought's Involvement

Forethought is an independent Marketing, Analytics and Strategy organisation with teams that specialise in research and engagement within multiple industries, including utilities.

Forethought's experience in the energy industry involves conducting customer and stakeholder research and engagement with organisations across the full value chain including electricity

generation, distribution, transmission and retail services. They partner with clients to provide an independent customer voice, ensuring that the customer is always at the forefront of organisational decision making.

Forethought was selected for this program based on their expertise across both utilities and research/engagement capability to independently design and facilitate engagement forums and objectively report back on the needs and preferences of customers across the network.

Image above: Rural and Regional Summit with customers of the Powercor network, Powercor stakeholders.

Image above: Rural and Regional Summit, Forethought facilitator and Adam Nason, Head of Customer Experience, Powercor.

Objectives and Methodology

Objectives and Methodology

The deep and narrow summits build on foundational and exploratory research conducted in the broad and wide engagement phase. This reflects Powercor's genuine commitment to develop a regulatory proposal that is anchored in customer needs and preferences for the immediate and longer-term future of the network.

The summit was hosted at RACV Goldfields in Creswick on the 26th June from 10.00am to 6.00pm. There were 46 attendees.

This deep and narrow: rural and regional summit sought to achieve the objectives set out below.

2026-2031 Regulatory Reset Objective
Develop a regulatory reset proposal for the 2026-2031 period that aligns with the needs and preferences of the Powercor customer base.

Engagement Objectives

Engagement with a range of Powercor customers and advocates to:

- Explore and understand regional and rural customer priorities and needs.
- Discuss, debate and prioritise considered customer outcomes / service levels aligned to customers' needs.
- Identify the trade-offs that customers make within service areas to identify the key priorities for investment for rural and regional customers.

Building on Existing Knowledge

Key insights from the broad and wide engagement phase were used to inform the design and content of this summit. Key topics that Powercor customers prioritised during the broad and wide engagement phase included:

1. *Affordability and equity*
   This was the most important theme to prioritise for regional and rural customers.

2. *Reliability and resilience*
   Customer satisfaction with their electricity supply varied depending on their location within Victoria and length of time living in Australia.

3. *Energy transformation*
   There was varying preferences for the pace of the energy transition, with some customers curious and other concerned.

4. *Customer experience*
   Customers reported a positive customer experience and minimal challenges to solve for; the expectation was to continue to deliver the same service levels.

The broad and wide report provides further detail into the findings from this engagement phase.[1]

[1] Powercor and Forethought, 2022, *Broad and Wide Stakeholder Engagement: Powercor Summary Report*, accessed 19th July 2023, https://media.powercor.com.au/wp-content/uploads/2023/03/09143202/Powercor_Broad_and_Wide_Summary_report.pdf

Approach

Forums were attended by Powercor senior executives and supporting team to listen and help answer questions of customers without biasing or leading the conversation. The following Powercor staff attended the rural and regional summit:

- Renate Vogt – General Manager, Regulation
- Mark Clarke, General Manager Electricity Networks
- Scott Russell – General Manager, Strategy and Customer Group
- Jessica Marriner – Head of Marketing and Communication (acting General Manager, Corporate Affairs)
- Adam Nason – Head of Customer Experience

Additionally, these forums were attended by customers across the Powercor network alongside interested members of the Powercor Customer Advisory Panel (CAP) and the Australian Energy Regulator (AER) who were invited to attend the forums in a viewing-only capacity.

Consideration was given to recruit participants with a strong interest in addressing power distribution issues, and from a diverse cross-section of the rural and regional community.

Recruitment

There were three main channels used to recruit participants. These were chosen to ensure that every possible avenue was utilised to attract a diverse group of highly relevant customers to participate. The recruitment process included:

1. An invite extended to engaged individuals including council members and community organisations. These invites were sent to customers by Powercor. Furthermore, each invite was encouraged to be extended to other interested parties if the recipient desired.
2. Social media was also used to share the consultation details and provide access to a link to sign up for this consultation.
    - Powercor used social media to further promote the consultations to the general public across the network
3. Additionally, to support recruitment Powercor reached out to their Customer Advisory Panel, as some members had a vast network in the regional and rural community.
    - Natalie Collard, CEO Food & Fibre, Great South Coast supported recruitment for this program leveraging the organisation's connection with food and fibre production businesses, as well as their vast supply chains across South West Victoria.

Compensation and Local Charity Donation

As consultations were held over a lengthy timeframe (8 hours), participants were compensated for time spent (a personal incentive of an e-gift card valued at $250 or the choice for accommodation overnight at the summit's venue).

In addition to the individual compensation payment, Powercor also made contributions to local charities of the participants' choice. Customers were provided the opportunity for their personal incentive to be donated to their preferred charity (see the Breeze Inc. donation included below). Below outlines the total donations across the Powercor engagement program:

- $2,250 was donated to the Foundation for Rural and Regional Renewal
- $250 was donated to Breeze Inc.

Session Methodology

The session commenced with an introduction conducted by Forethought and scene setting undertaken by Renate Vogt from Powercor to inform customers about the context of the session and areas for discussion.

The themes for discussion were:

1. Improving reliability, access to network capacity, power quality and rural equity
2. Enhancing the planned outage process (e.g. outage restoration times) and managing customer vulnerability
3. Community expectations of our role in disaster recovery, and prudent future planning for climate-related extremes
4. Facilitating a sustainable energy transition

These themes were broken down into a number of specific topics for the purpose of discussion:

Theme 1	Improving reliability, access to network capacity, power quality and rural equity	Improving network reliability
		Improving access to network capacity
		Improving power quality
		Improving regional and rural equity
Theme 2	Enhancing the planned outage process (e.g. outage restoration times) and managing customer vulnerability	
Theme 3	Community expectations of our role in disaster recovery, and prudent future planning for climate-related extremes	
Theme 4	Facilitating a sustainable energy transition	Facilitating a sustainable energy transition (export services)
		Facilitating a sustainable energy transition

To gain a deeper understanding of customer priorities, the topics outlined above were thoroughly examined in smaller working groups. All participants were broken into smaller tables, comprising approximately 8-10 customers. These focused sessions were carefully facilitated to ensure that all participants had an equal opportunity to express their perspectives and provide feedback—a level of engagement that would have been challenging to achieve in a larger forum.

Within each discussion, customers were asked to reflect on their experiences, and consider their electricity needs and preferences today and into the future. They were asked to vote on a series of proposed outcomes presented for each theme. Each service level proposed three ‘options’ with varying outcomes in each. As the Options progress from 1-3, the level of investment required from Powercor to implement them increased.

Participants were provided with pre-reading prior to the summit. This information, carefully selected to educate participants without introducing bias, encompassed general knowledge about the key issues explored at the summit. Great attention was given to presenting the information in a clear and accessible language and format, ensuring it did not influence customers’ perspectives. The information packs drew upon both publicly sourced data and network data. When each new topic was introduced, facilitators and Powercor stakeholders provided a synopsis of the pre-reading to participants and gave them an opportunity to ask questions. Facilitators played a crucial role in moderating these discussions, allowing for the dissemination of information while ensuring that the primary focus remained on customers sharing their feedback and ideas.

Customers were encouraged to suggest and record any outcomes beyond those proposed by Powercor. All suggestions were recorded for consideration. After covering all themes, customers voted on which topics were most important to them across all topics presented throughout the day.

After all topics had finished being discussed, participants were given a questionnaire divided into two parts. In the first part, facilitators requested that they identify the top three topics they deemed most significant. Subsequently, participants received additional information outlining both the required investment from Powercor and the corresponding impact on customers' bills to achieve the desired outcome. This exercise was designed to determine whether the added context of the level of investment required for solutions, and the impact to customers' bills, would cause customers to change their original choice of most significant topics. Participants were then asked to provide an explanation and context for their final voting decisions.

Following the consultations, Forethought undertook various reporting workshops and internal quality checks to align on the customer themes and preferences that are reported on within this document.

IAP2 Spectrum

The level of customer participation in this program was intentional and is highlighted in our depiction of the IAP2 Spectrum shown below. Within this consultation, customers were involved in shaping the direction of focus for Powercor by discussing a wide range of issues, and then voting on the area they thought was most important.

IAP2 Spectrum of Public Participation[2]

	Inform	Consult	Involve	Collaborate	Empower
Public Participation Goal	To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.	To obtain public feedback on analysis, alternatives, and/or decisions.	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.	To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution.	To place final decision making in the hands of the public.

Engagement Context

During the consultation period, several events took place in both the lives of customers and within the wider electricity sector. We hypothesise these events impacted customers' needs and perceptions.

At the time of engagement, the following events occurred. Some customers referenced several of these events throughout the discussions at the summit:

- Six months after significant floods "devastated" Rochester, the community is still attempting to rebuild, with many living in caravans and sheds waiting for their homes to be rebuilt[3].

[2] IAP2, 2018, IAP2 Spectrum of Public Participation, accessed 22 November 2022, https://iap2.org.au/wp-content/uploads/2020/01/2018_IAP2_Spectrum.pdf

[3] Herald Sun, April 2023, *Town's desperate cry for help: Six months since floods, families still living in sheds and caravans,* accessed 15 July 2023, *https://www.heraldsun.com.au/news/victoria/six-months-since-northern-victoria-floods-families-are-still-living-in-sheds-and-caravans/news-story/cb6c3378cdded8eb86275ee8691aac49*.

- In recent years, Trentham had experienced multiple extreme weather events[4].
- Severe rainfall and flooding across Victoria from 11 October 2022 [5].
- In recent years local Victorian communities have opposed the construction of VNI West[6].
- Concerns raised about the impact of VNI West on rural and regional communities[7].
- Local Victorian communities voice resistance for the route for Western Renewables Link[8].
- Continued cost of living rises for Victorians announced July 2023, "more than one million Victorian households will be hit with power bill increases of up to $361 a year."[9]
- Victorian Government Election campaigns in late 2022 including the announcement to re-establish the State Electricity Commission of Victoria[10].
- War in the Ukraine with the Russian invasion impacting Australian energy prices[11]
- Well-publicised cyber-attacks on Optus (22/9/22[12]) and Medibank (12/10/22[13]).

[4] The Courier, June 2021, *Trentham with no power or road access and water because of extreme weather,* accessed 15 July 2023, https://www.thecourier.com.au/story/7291734/power-could-be-out-into-the-weekend-for-some-people-powercor-pleads-for-patience/.

[5] Abbott. L, Ilanbey. S, Schelle. C, 11 October 2022, *People in flood risk areas told to prepare for up to 72 hours of isolation as heavy rains loom,* The Age, accessed 8 November 2022, https://www.theage.com.au/national/victoria/calm-before-the-storm-victoria-prepares-for-more-floods-20221011-p5botc.html.

[6] Herald Sun, April 2023, *'Monumental mistake': Energy experts slam power projects in Victoria's west*, accessed 15 July 2023, https://www.heraldsun.com.au/news/victoria/monumental-mistake-energy-experts-slam-power-projects-in-victorias-west/news-story/9fb49b9f99be2567e59a9eebeaea48e7.

[7] Weekly Times, July 2023, *Power dictate: D'Ambrosio adds $154m to NSW VNI West route,* accessed July 2023, https://www.weeklytimesnow.com.au/news/power-dictate-dambrosio-adds-154m-to-nsw-vni-west-route/news-story/2c63a8f4eb9aa6720db516bdf71b0dcc.

[8] The Guardian, *'Everyone's against it': the powerlines dispute in one of Victoria's most marginal electorates*, accessed 15 July, 2023, https://www.theguardian.com/australia-news/2022/nov/23/everyones-against-it-the-powerlines-dispute-in-one-of-victorias-most-marginal-electorates.

[9] Herald Sun, June 2023, *Power blow: Energy bills set to rise,* accessed 15 July, 2023, https://www.heraldsun.com.au/news/victoria/how-much-more-youll-pay-for-power-from-august-revealed/news-story/17187aa2411f753cab740ce1fdf86eaf.

[10] ABC News, November 2022, *Victorian state election campaign officially begins with promises on V/Line and water bills,* accessed 8 November, https://www.abc.net.au/news/2022-11-02/victorian-state-election-first-day-of-campaign/101607624.

[11] Mercer. D, 26 February 2022, *Russian invasion of Ukraine drives up energy costs and Australians will feel the pain,' ABC News,* accessed 8 November 2022, https://www.abc.net.au/news/2022-02-26/russia-invasion-of-ukraine-to-drive-up-energy-costs-for-all/100861246.

[12] ASIC, 2022, *Guidance for consumers impacted by the Optus data breach*, accessed 8 November 2022, https://asic.gov.au/about-asic/news-centre/news-items/guidance-for-consumers-impacted-by-the-optus-data-breach/#:~:text=On%2022%20September%202022%2C%20Optus,numbers%2C%20may%20have%20been%20exposed.

[13] Krester. A, Smith. P, 25 October 2022, *Minister preps for Medibank hack fallout,* Australian Financial Review, accesses 8 November 2022, https://www.afr.com/companies/financial-services/medibank-says-more-customers-hit-by-cyberattack-20221025-p5bsl9.

Evaluation

At the conclusion of the consultation, customers were asked to complete a feedback survey to support refinement of the engagement process. The results for the Powercor consultations are below.

Location/ customer group	Overall satisfaction (Out of 5)	Customer comments
Rural and Regional summit	4.17	"Great cross section of participants. Huge kudos to Powercor for organising. Needs to do this more. Mark Clarke (GM Powercor) was brilliant." (Powercor customer, 2023) "Great to have such leaders from Powercor on our tables being able to answer questions with knowledge - we needed it. However, questions and options posed were self-limiting in their depth - I wanted more ambition to be involved in enabling decarbonisation." (Powercor customer, 2023) "On behalf of my community, very grateful for this opportunity to have input/collaborate. B) Learn more about the transition challenge, c) get insights to Powercor's significant challenges." (Powercor customer, 2023)

Image above: Rural and Regional summit with customers of the Powercor network, and Jessica Marriner, Head of Marketing and Communication (acting General Manager, Corporate Affairs)

Customer Perspectives on Engagement Themes

Executive Summary

Customer perspective on immediate priorities to be addressed

The purpose of the rural and regional summit hosted by Powercor was to understand how rural and regional customers prioritise key topics and outcomes and whether this is impacted by any trade-offs (e.g., impact to a customer's bill). This report highlights the key findings from the summit, where consistent themes regarding the most important topics were identified among the participants. *Improving reliability* emerged as the most important topic. However, it is crucial to consider these prioritised topics within the context of the qualitative discussions that took place. Many participants viewed the topics as interconnected or outcomes of each other. For example, *improving network reliability, capacity* and *power quality* were perceived to have direct impact on *improving rural and regional equity*. Additionally, *improving rural and regional equity* and *enabling communities to participate in the clean energy transition* were considered outcomes of the top three prioritised topics. This is an evolution to the way these topics were discussed during earlier stages of engagement (e.g., broad and wide engagement, 2022-2023). In previous research engagements, these topics were discussed discrete from each other.

To determine where investment could best be spent, participants were asked to consider which topics were most important to them, and were provided with an online polling tool for voting. Options ranked highest were considered the most important for Powercor to invest in. First, participants voted based on their initial preferences, and subsequently, they were presented with an overview of the estimated costs associated with each topic. This exercise aimed to demonstrate the potential impact on customers' bills resulting from investment choices made by Powercor. Participants then voted a second time, taking into account the holistic cost to customers for each option. Although there were slight changes in the outcome between the first and second vote, the prioritisation of the overall topics remained consistent.

The participants were keenly aware of the existing inequity between metropolitan and rural/regional communities. They recognised the negative impact this disparity had on their communities and emphasised the significance of a reliable electricity network as the foundation for the well-being and development of rural and regional areas. The failure to improve reliability was perceived as a hindrance to the sustainability and growth of these Victorian communities, especially for energy-intensive industries such as agriculture and manufacturing. *Improving regional and rural equity* also emerged as one of the top topics of importance, it held high priority and was considered an outcome of *improving network reliability, capacity* and *power quality*. It was crucial to acknowledge the connections between these themes as discussed by the participants during the summit.

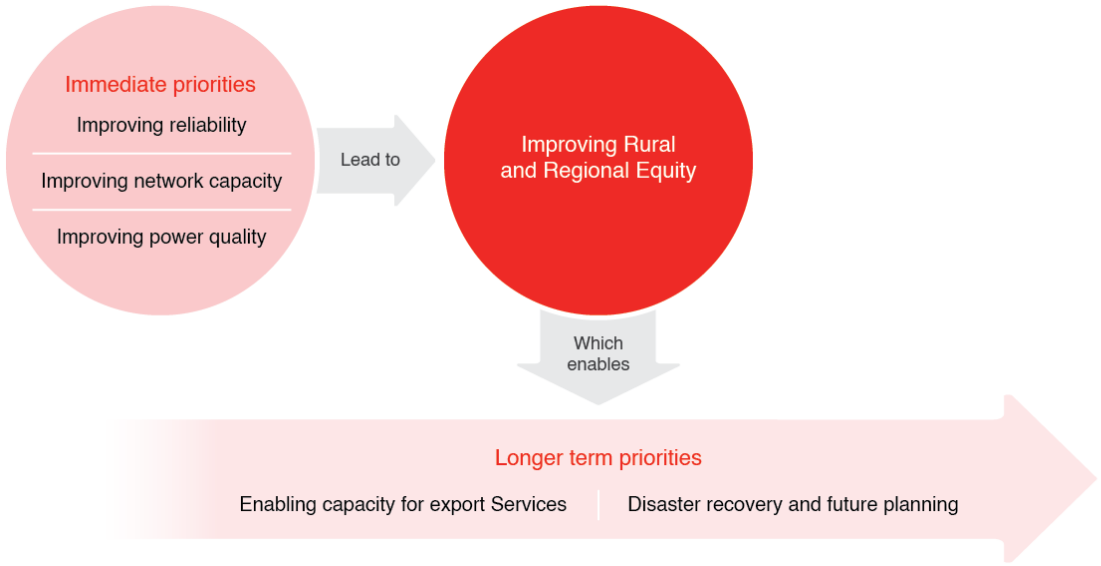
These findings provide valuable insights into the perspectives of the participants and their prioritisation of key topics discussed during the summit. The interconnectedness of the themes emphasises the need for a comprehensive approach to address the identified preferences and ensure the equitable development of both metropolitan and rural/regional communities. It is important to note that the above outcomes represent all topics presented at the summit. In the body of this report, these outcomes are broken down by individual topic.

Customer perspective on longer term priorities to be addressed

There was an eager interest from participants to focus the conversations throughout the day beyond the immediate regulatory reset period, towards a longer-term vision (i.e., 10-20 years). The participants strongly believed that without considering longer-term outcomes, rural and regional communities would continually lag in bridging the inequality gap between metropolitan and rural and regional customers. This concern aligns with a broader narrative identified in previous research conducted with Powercor customers (broad and wide study, 2022-2023), which revealed a perception of historical neglect of rural and regional customers. Customers at the summit expressed concern that the five-year regulatory reset period is insufficient to impact significant and lasting changes for their

communities. At the conclusion of the summit, each of the five customer groups presented their discussions and preferred outcomes back to the broader group. There was universal agreement across the room for the idea of shifting thinking and planning beyond only the immediate regulatory period.

Two additional topics gained prominence in discussions: *export services* and *disaster recovery*. Unlike the priority topics discussed above, customers recognised that these topics are shared responsibilities between customers, communities, distributors and even other agencies. Export services were discussed as a crucial capability for empowering rural and regional communities to actively participate in and benefit from the clean energy transition. However, customers acknowledged that enabling export services for these communities would not be feasible without first addressing immediate concerns such as reliability and capacity, which are essential for addressing existing inequalities. This is increasingly salient in the context of changing weather extremes, with Victorian communities experiencing more frequent, severe and widespread events due to climate change. Some customers who attended the summit had experienced extreme weather events first hand (e.g., Trentham flooding and bushfires). The graphic below shows the connection between each topic as explained above. It demonstrates that while customers expressed desire for 'immediate priorities' to be addressed, in order to also address 'longer term priorities', action must be taken now.



Common themes across alternative outcomes proposed by customers

Across all topics discussed during the summit, customers were eager to present outcomes outside of those presented to them. Some common themes emerged when considering all suggestions put forward by customers.

- Hybrid power supply for rural/regional homes and communities: many customers suggested that a combination of 'islanding' with traditional mains connection may have significant positive impact on addressing several of the issues presented throughout the summit (e.g., reliability, disaster recovery, providing storage for excess solar generated).
- Universal three-phase power connection for rural/regional communities: Participants felt this would begin to address many issues discussed (e.g., capacity, reliability, access to CER, access to export services etc.)
- Regulatory amendments / role for Victorian Government to play: Many conversations throughout the day were about the need for Government to play a role. The practicality of that role was broad at times, for example many voiced the desire for Government support for or collaboration with Powercor. As well as the need for regulatory amendments to enable

Powercor to implement changes that would have real and positive impact on them and their communities.

It is important to note that the detail of this report outlines suggested outcomes according to each topic discussed at the summit. The above is merely a high-level summary of suggestions that emerged across multiple topics. These supplementary suggested outcomes will be taken forward for deeper exploration to future engagements including additional in-depth interviews with rural and regional customers.

Image above: Rural and Regional Summit with customers of the Powercor network, Powercor stakeholders.

Customer perspective on improving reliability, access to network capacity, power quality and rural/regional equity

Introduction

Improving reliability emerged as the most important topic. Many participants viewed improving network reliability, capacity and power quality as interconnected or outcomes of each other (for example, improving access to quality and capacity would lead to greater reliability). Participants prioritised reliability, capacity and power quality but acknowledged that addressing current inequity between rural and regional communities and metropolitan communities would be an outcome of investing in these areas for rural and regional customers. Participants viewed reliability (along with capacity and power quality) as a cornerstone of a thriving rural or regional community.

"Without three-phase supply we are becoming equivalent to a third world country." (Powercor customer, 2023)

Improving reliability, capacity and power quality was considered critical to survival and growth of rural and regional communities

Customers raised many common concerns about the impact reliability had on their communities:

- Reliability impacted regional/rural businesses' ability to sustain themselves and provide employment.
- They feared businesses may be forced to leave regional/ rural areas, in turn creating job losses.
- They feared it was increasingly difficult to attract new businesses to rural and regional communities. They argued that this issue ultimately placed more pressure on metro Melbourne to sustain an ever-growing population.

Customers believed that the current reliability performance and network capacity were disincentives to major development i.e., customers discussed these topics as major barriers to population, business and in turn economic growth across rural/regional communities.

Customers believed the disparity of reliability between metropolitan and regional/rural was having a negative impact on their communities. They perceived a reliable electricity network and access to three-phase power to be the foundations for development of rural and regional areas.

In contrast with residential customers who were less concerned with brown outs', it was noted these events had major impact when they occur for large agricultural business or farms. These kinds of outages can result in several hours of lost productive business output.

There was a desire for distributors to invest in improving reliability, power quality and capacity as a way to break this cycle. Customers believed that without access to three-phase businesses will eventually leave local communities. This would lead to decreased jobs and declining populations. In turn, they believed smaller populations will lead to divestment in distribution infrastructure. Consequently, the communities heavily dependent on energy-intensive sectors like agriculture and manufacturing interpreted the lack of progress in enhancing reliability and capacity as an obstacle to their sustainable development and expansion. Some farming customers expressed concern, because they are increasingly investing in electric-powered agricultural equipment (e.g., electric combine harvesters).

Many customers reflected that poor access to capacity currently led to an inability to scale business operations, in turn driving economic uncertainty for rural/regional communities. When customers were asked at the end of the summit to vote on their prioritised outcomes across all themes, they were shown potential costs associated with each outcome. For many, the potential cost of upgrading the network did not detract from their desire to prioritise these topics. Rather, some customers suggested staggering the cost to customers over several years.

Many customers believed that Powercor could play a critical role as an enabler to economic uplift for regional and rural communities.

Addressing poor reliability, power quality and limited capacity was perceived as enabling communities to participate in the clean energy transition

In the context of struggling for what they view as basic reliability standards on par with metropolitan areas, customers regarded participating in the energy transition as a lower priority. Despite this, customers were eager for themselves and their communities to possess the capability to participate in the clean energy transition in the future. However, they believed that without first addressing improving reliability and capacity, they will always be behind. They understood that there was already a significant gap and had

concerns this will only be exacerbated with time and the current level of access.

Customers felt frustrated, believing that their inability to participate in a sustainable future was impacting their reputations. They believed their businesses were being tainted by the perception from their customers and the public that they use “dirty energy”.

“It baffles me, I can’t have the option of three-phase power, but I am providing food for the nation.” (Powercor customer, 2023)

Inability to access and use the renewable energy generated by their communities compounded the perception of inequity across rural/regional and metro

Numerous customers in these areas had renewable energy generation or transmission lines within their communities. However, the existing network fails to enable them to access or use renewable energy. Many discussed concerns that all renewable energy generated is transmitted directly to urban areas. Customers expressed dissatisfaction with the level of compensation and acknowledgment they received for the value they brought to urban customers. For example, some customers discussed how the renewable energy from wind farms that had been erected in their areas was being transported to Sydney to support energy supply for Amazon headquarters. These customers’ businesses had no access to this energy source.

Business customers discussed how they are unable to participate or benefit from sustainability incentives or initiatives. For example, some customers discussed that some FTAs (Fair Trade Agreements) might offer incentives or preferences to businesses that can demonstrate lower carbon emissions throughout their supply chains. Regional businesses with power sources reliant on coal-fired generation may struggle to accurately measure and report their carbon footprints, making it challenging for them to access these incentive and advantages. Additionally, some FTAs may incentivise the export of goods to overseas markets with lower carbon emissions, favouring businesses that can produce sustainably.

Similarly, customers believed their businesses faced negative impacts to their reputation. They believed their current operating context is one where sustainable business practices have become a basic expectation for their customers and communities. They thought their businesses couldn’t fully adopt sustainable practices due to power limitations and believed they were leaving themselves vulnerable to criticism, missing marketing opportunities and facing potential damage to their reputations. Customers believed that by addressing these limitations, their businesses could build authentic reputations for sustainability, enabling them to leverage multiple benefits associated with the growing demand for environmentally responsible products, services and business practices.

Some customers put forth the argument of wider economic contribution, contending that regional areas contribute significantly to the overall welfare and economic prosperity of the state and nation, while also serving as major employers. It is suggested that the Australian Energy Regulator (AER) should incorporate a "broader set of values" when considering the contribution equation, or alternatively, impose higher charges on urban areas. Customers argued that other important aspects should be taken into account when assessing the contributions of regional areas and the benefits they provide to the state and the nation. Some suggestions from customers were related to economic growth, social and environmental values:

- **Stimulating economic growth** – More affordable and reliable electricity can attract businesses or stimulate growth, job creation and improved livelihoods in these regions.

- **Enhancing social values** – Reliable power supply is crucial for maintaining the wellbeing and quality of life in both urban and regional areas. Customers believed that considering social values, such as ensuring access to essential services, could work towards promoting social equity and improving the standard of living for all residents.

- **Promoting environmental values** – customers believed incorporating environmental values could encourage energy efficiency and renewable energy adoption. They reflected that recognising the positive environmental contributions of rural and regional energy generation could incentivise further investments in clean energy projects and support sustainable practices.

Customers believed incorporating a “broader set of values” could lead to more equitable, sustainable and community-oriented distribution. They reflected that recognising wider contributions of regional areas, the AER can support regional development and enhance customers satisfaction.

“It’s a ‘basic service’ inequity when a man in the city can subdivide a block and get three-phase for “tinkering in his shed”, when genuine businesses which are the fabric of the community, and employing so many, can’t get it.” (Powercor customer, 2023)

The following table lays out the outcomes prioritised by customers to address the four topics included in this theme:

Customers' prioritised outcome within this theme	Customers' proposed outcomes
The following points lay out the proposed outcomes included in option 3 (option 3 was prioritised by customers for this theme): • *Targeted improvements (i.e., network hardening) for all targeted regional investment, such as upgrading single phase backbone to three-phase supply could be undertaken in areas that generate important goods or services to Victorians or beyond (such as the dairy industry).* • *Additional three-phase upgrades could be made to most regional or rural communities to enable fast EV charging. However, some SWER customers at the end of long-lines would continue to rely on all plug charging.* **Customers' notes on prioritising these outcomes:** There was a strong desire for option 3 out of those presented to customers. Most customers voted for Option 3 across each topic (in particular improving network capacity and reliability). Even when they noted that there would be significant impact to their bills.	**The following are alternative outcomes suggested by customers beyond those presented by Powercor at the summit:** • There was a consistent and strong desire for universal three-phase power. This was believed to solve much of the network's problems. • Many customers felt that the existing conversation and pathways in place to transition regional and rural communities to three-phase power supply was too slow. Some suggested offering customers an option to buy this themselves, even if it would involve significant expense. • Some customers believed that to accommodate the pace of change/improvement needed for this area, regulatory amendments and greater flexibility was needed.

Image above: Rural and Regional Summit with customers of the Powercor network, Powercor stakeholders.

Community expectations of our role in disaster recovery, and prudent future planning for climate-related extremes

Introduction

The topic of extreme weather events was given a higher priority by those who had personally experienced such events. Research to date supports this finding and explains that it is difficult for people to fully understand this topic unless they have personally experienced or been impacted by it. Many participants in the summit were customers who had firsthand knowledge of disaster recovery and the consequences of climate-related extremes on their communities, such as recent flooding events in Trentham and Rochester.

Customers expressed a desire for Powercor to adopt a measured and strategic approach to disaster preparedness and recovery, rather than resorting to excessive investment measures. For example, some outcomes may be significantly more expensive than others such as 'undergrounding' to mitigate damage in flood prone areas or targeted 'network hardening'. They emphasised the importance of thoughtful and targeted investments aligned with community feedback and needs that would yield the greatest impact.

Customers who had experienced the impacts of an extreme weather event had a more precise opinion of where targeted investments could have an efficient impact

For those that had experienced an extreme event, investment in non-network solutions were prioritised. This included prioritising options such as SAPS (standalone power systems) and microgrids. Customers believed investing in these kinds of measures would mitigate reliance on the network in the long term. They believed that enabling these kinds of solutions would decrease negative impacts on communities when weather caused damage to distribution networks. It would provide them the ability to support themselves in times when there is a significant interruption on the network. Although they also acknowledged the approach would likely need to be tailored to each community. Particularly because some outcomes may be more appropriate to communities vulnerable to bushfires as compared with areas that were prone to flooding or other kinds of extreme weather events. Those who had been impacted understood where targeted investment could have the most significant impact.

Customers felt that any response by Powercor should be in collaboration with the community and finely tuned to their specific needs. When events happen, it impacts both grid and non-grid (e.g., community infrastructure) assets. As a result, customers felt it was vital that any Powercor recovery investment is conducted in line with community rebuild efforts and adopts a holistic approach to recovery. A rapid rebuild response by Powercor that was not aligned with the communities' pace to rebuild other areas and infrastructure could cause more difficulty.

For example, some customers reflected on experiences where an entire community was cut from power with no access to refrigeration for food or water. Customers believed this could have been addressed through SAPS or installation of a community generator in the local store. This would have meant customers had a central and communal gathering point to store shared food supplies until individual households could be restored or reconnected.

Customers expressed desire for a preparation kit. In particular, a list of licensed local electricians would be useful, as it was felt that these were often the hardest roles to find to sign off on reconnecting the power once it went out.

Customers understood that there was a critical role for Powercor to play as part of a multi-agency response team

Many customers felt that Powercor's role was to respond as part of a coordinated and collaborative multi-agency response effort. Within this, they expected Powercor should be responsible for electricity / distribution related measures. There was an expectation this recovery effort should be led by a local representative who is familiar with the local infrastructure, community and their needs (e.g., SES or CFA). There was a desire from customers to see a greater level of collaboration between multi-agency response teams. They believed there were roles to play for Powercor, SES, CFA, plumbers /other trades as well as the Victorian Government.

"Community disaster recovery is incredibly important, but it is not for Powercor to lead." (Powercor customer, 2023)

Mobile Emergency Response Vehicle (MERV) plays two critical roles; both practical and psychological in disaster recovery and response

MERV has a dual positive impact on customers. The way the vehicle was deployed meets multiple needs for customers:

1. **Practical support** – provides a practical source of power to address immediate needs (e.g., backup generator).

2. **Psychological support** – MERV served as a crucial gathering point for community members, enabling them to exchange information, recharge their mobile phones for connecting with friends or family, and enjoy a warm beverage, effectively becoming a community meeting point. This form of support plays a vital role in alleviating feelings of isolation and loneliness experienced by those impacted by weather events.

The following table lays out the outcomes prioritised by customers to address the topic included in this theme:

Customers' prioritised outcome within this theme	Customers' proposed outcomes
The following points lay out the proposed outcomes included in option 2 (option 2 was prioritised by customers for this theme): *Maintain our existing disaster preparation and recovery measures, and supplement these with the following:* • *Update to design standards and replacement of some assets over time to reflect changing climate conditions.* • *More targeted network hardening in at risk areas ('more' refers to an increase from Option 1).* • *Some targeted SAPS (standalone power systems) and community, grid-connected microgrids.* • *Larger MERV fleet, supported by trained community liaison officers ('larger' fleet when compared with Option 1).* • *Pre-preparing some community hubs in high-risk locations to better support communities in the event of extreme weather. Increased number of MERV fleet, supported by trained community liaison officers.* • *Assist in development of community resilience plans in conjunction with high and medium risk communities.* • *Increase the relevance and personalisation of communications delivered during prolonged outages.* **Customers' notes on prioritising these outcomes:** Some customers were sceptical of the options presented, and were cynical that Option 3, which laid out the highest investment level, would be feasible.	**The following are alternative outcomes suggested by customers beyond those presented by Powercor at the summit:** • For those that had experienced an extreme event, investment in non-network solutions was prioritised. This included SAPS and microgrids, which were also seen as a means of reducing reliance on the grid long-term. • For those that hadn't experienced an extreme event, priority was placed on the coordination of emergency response (outlined in more detail above). • Customers believed that any strategic disaster recovery plans must be developed in partnership with individual communities and tailored to each community's specific needs. • Customers believed it was critical for Powercor staff to be embedded within regional incident control centres to address any issues that arose from their perspective as subject matter experts in electricity and distribution. They noted it was important for this representative to be empowered to make assessments and implement decision making in real time.

Facilitating a sustainable energy transition

Enabling capacity for Export Services

Introduction

The development of regional and rural communities into net energy exporters garnered interest. However, concerns regarding the current infrastructure's capability to facilitate this objective were prominent.

One contributing factor to this lack of faith stemmed from the limited access regional and rural communities had to the energy they generated for exports. Presently, the exports generated by these communities were solely utilised by urban customers. They believed insufficient remuneration was provided to regional and rural communities.

In terms of prioritisation, the topic of enabling regional and rural communities to export solar was ranked lower compared to considerations of reliability, capacity management, and power quality. Nonetheless, it remained an important topic, particularly when looking beyond the immediate five-year regulatory reset period. Customers expressed a desire to engage in discussions and outcomes that extend to a longer-term perspective. They believed that achieving lasting and sustainable impacts on their communities necessitated moving the conversation beyond a five-year timeframe and focusing on ten to twenty years ahead. They could not see how the barriers enabling them to more wholly participate in the clean energy transition could be solved within a five year regulatory reset period. Therefore, they believed the change they desired would not be included and any one single regulatory reset period. Consequently, the importance of export services gained higher priority when the conversation shifted to long-term perspectives.

Overall, while enabling export services was not deemed as crucial as ensuring improved supply reliability and access to network capacity, customers expressed interest in facilitating exports. However, the proposed options for enabling exports were perceived as inadequate mechanisms by the customers.

<u>Customers viewed export tariffs as a disincentive to uptake solar</u>

There was significant and nearly universal negative sentiment towards export tariffs. It is important to note that customers perceived ‘tariff’ as a charge. Customers overwhelmingly expressed negative sentiment towards export tariffs, considering them a deterrent to adopting rooftop solar. This sentiment was prevalent across a wide range of customers. With the availability of incentives provided by state and federal governments to encourage the uptake of solar energy, export tariffs were perceived as counterproductive in promoting solar adoption.

Critically, customers believed that if there was going to be any impact to power bills then their preference was to maintain status quo and not invest in any of the options presented over addressing issues such as reliability, quality or capacity. They believed they had a right to benefit from the renewable energy being produced in or transmitted through their communities. Communities were inclined towards the idea of storing and utilising solar power locally. However, customers did not consider the proposed options for enabling exports as suitable approaches to fulfill this desire.

“We’re the ones hosting the generation [i.e., renewable power] and not recognising the value of food and fibre is a slap in the face.”
(Powercor customer, 2023)

Powercor's Sustainable Future

Introduction

Customers, in general, exhibited a certain level of hesitance to actively engage with the topic, primarily stemming from its perceived lower prioritisation compared to issues such as reliability. Consequently, they felt that there was limited scope for substantial discussion on the matter. Further probing revealed a widespread consensus among customers that while acknowledging the positive impact of reducing emissions associated with Powercor operations, it did not rank high in priority relative to other topics addressed during the summit.

<u>Some perceived this topic as a benefit to Powercor and therefore should not be funded by customers</u>

Some customers regarded this topic as beneficial to Powercor and therefore it should not be funded by customers, particularly in the context of an ongoing cost of living crisis. The presented outcomes were viewed by certain individuals as favouring Powercor, leading to a notable negative sentiment towards prioritising this topic over others, such as addressing equity concerns. As a result, customers found it difficult to justify allocating additional expenditure beyond maintaining the status quo.

Moreover, customers considered the electrification of fleets redundant as they believed the network in regional or rural areas could not handle the additional capacity without issues. Furthermore, they expressed doubts about the availability of adequate capacity, power quality and infrastructure, such as charging stations, outside metropolitan areas to sustain a fleet of electric vehicles.

The following table lays out the outcomes prioritised by customers to address the topics included in this theme:

Customers' prioritised outcome within this theme	Customers' proposed outcomes
The following points lay out the proposed outcomes included in option 3 (option 3 was prioritised by customers for this theme): *New solar customers are provided the option of either static or flexible export limits:* • *Static export limit for most customers is set close to the average size (6kW) of typical customer solar systems.* • *Flexible export limits for most customers are designed to allow higher export capacity than the higher static limit expect during periods of network stress.* • *No export tariff, compliance program or export tariffs.* **Customers' notes on prioritising these outcomes:** It is important to note that Option 3 lays out the preferred outcomes when participants were asked to vote. Customers were reluctant to endorse the existing options presented, feeling that better alternatives were available (see the column to the right for suggestions from customers).	**The following are alternative outcomes suggested by customers beyond those presented by Powercor at the summit:** • There was more interest in storage solutions and self-consumption rather than feeding back onto the grid. • Interest in community storage as an alternative.

Enhancing the planned outage process (e.g., outage restoration times and manager customer vulnerability)

Introduction

A well-managed planned outage process is highly valued by all customers, given the significant impacts it can have on their households, friends, families or businesses. However, they were generally satisfied with the current level of service provided by Powercor and referenced a significant improvement in performance over recent years.

Tailored approach to outage notifications may be needed for some customer types

Some farmers reflected that ‘doorknocking’ was inappropriate and unwanted because it represented biosecurity risk regarding access to agricultural areas. Similarly, for customers such as dairy farmers, animal welfare was of critical importance. Planned outages represented a significant interruption to their business. These customers preferred weekend timings for outages, as weekdays posed the risk of spoilage for fresh produce within a few hours. Additionally, some dairy farmers suggested limiting to times of the day outside of milking time would be more suitable.

While the majority of customers found letters and text messages to be effective communication methods, concerns were raised about contacting elderly or vulnerable customers who may have limited phone access or difficulty remembering dates for planned outages if provided several days in advance. One proposed solution was for these customers to nominate a contact person who would receive information and notifications regarding planned outages on behalf of the vulnerable customer, even if they do not reside together. MERV was appealing to customers as a means of providing respite to communities during planned outages but overall, there was not priority placed on further investment above and beyond the status quo.

The following table lays out the outcomes prioritised by customers to address the topics included in this theme:

Customers' prioritised outcome within this theme	Customers' proposed outcomes
The following points lay out the proposed outcomes included in option 1 (option 1 was prioritised by customers for this theme): • *Earlier notification of planned outages e.g., prior to the existing 4 business day requirement under the Electricity Distribution Code of Practice (EDCoP).* • *Doorknocking impacted homes before electricity is disconnected (as proposed under the Energy Charter).* • *Annual engagement with large customers on preferred outage windows.* • *More planned work being conducted on weekends or after hours.* **Customers' notes on prioritising these outcomes**: Customers voted for Option 1 because they felt there was little need to address the outcomes related to this topic. Many customers believed the current performance level across planned outages was satisfactory and preferred to invest the hypothetical spend in other areas they felt needed it more (e.g., reliability, capacity and power quality).	**The following are alternative outcomes suggested by customers beyond those presented by Powercor at the summit:** • One proposed solution was for vulnerable or elderly customers to nominate a contact person who would receive information and notifications regarding planned outages on behalf of the vulnerable customer, even if they do not reside together.

Image above: Rural and Regional Summit with customers of the Powercor network, Powercor stakeholders, and Forethought facilitators.

Appendix

The tables included in this Appendix lay out the total options presented to customers to address each topic at the summit.

Improving reliability

Status Quo	Option 1	Option 2	Option 3
• The number of electricity outages experienced by communities varies significantly across the network depending on geographic location. • Rural communities experience worse reliability on average, particularly those on long feeders [refer to chart on slide 7]. During 2022, average rural long customers experienced **~300 minutes off supply**, while customers in one of the worst-served communities (Colac) experienced nearly **~800 minutes off-supply.** • Customers are becoming more reliant on energy supply for their everyday lives, this reliance is predicted to increase with the adoption of new technologies such as electric vehicles. • To explore more equitable access to reliability, we are testing customer preferences for the principle of introducing a 'minimum reliability threshold' for customers on rural feeders	• Targeted improvements (i.e. network hardening) for communities on rural feeders triggered in areas where 'average' customer minutes off supply exceed 1,200 minutes in two consecutive years • Considered in the context of the chart on slide 7, this reliability threshold would not trigger any works. While Colac reached over 1,600 minutes off supply during 2019, this then reduced to below the threshold in 2020 (~1,100 minutes off supply)	• Targeted improvements (i.e. network hardening) for all communities on rural feeders, triggered in areas where 'average' customer minutes off supply exceed 800 minutes in two consecutive years. • Considered in the context of the chart on slide 7, this reliability threshold would trigger works in Colac as it met the threshold over 2018-2020.	• Targeted improvements (i.e. network hardening) for all communities on rural feeders, triggered in areas where 'average' customer minutes off supply exceed 400 minutes in two consecutive years. • Considered in the context of the chart on slide 7, this reliability threshold would trigger works in Colac in 2015-2016 and in 2018-2020. It also would have triggered works in Ballarat North in 2017-2022.

Improving network capacity

Status Quo	Option 1	Option 2	Option 3

• Access to network capacity is typically lower for regional and rural customers due to the type of overhead lines supplying their electricity.
• Examples of the impacts of lower network capacity experienced on our network today include:
  • primary schools being restricted from installing air-conditioners
  • dairy farms and other manufacturing businesses being unable to expand their operations
  • limitations on residential customers installing induction cooktops
• In the future, access to network capacity is likely to diminish further for regional and rural customers (holding all else equal) with new demand from electric vehicles (EVs) and electrified gas.
	• Targeted regional investment, such as upgrading single phase backbone to three-phase supply could be undertaken in areas that generate important or significant value/goods/services to Victorians (such as the dairy industry).
	• Many regional and rural customers, however, would remain on single-phase or SWER supply.
	• For regional and rural customers with EVs, charging is likely to be incentivised to coincide with solar production during the middle of the day to manage diminishing capacity. Slow charging with a wall plug is an alternative option, which can take 30-40 hours to fully charge a medium-size residential vehicle.
		• Targeted regional investment, such as upgrading single phase backbone to three-phase supply could be undertaken in areas that deliver important goods or services to Victorians or beyond (such as the dairy industry).
		• Additional three-phase upgrades could be made to some regional or rural communities to enable some fast EV charging. However, many regional and rural customers would still predominately rely on wall plug charging or daytime charging with solar.
			• Targeted regional investment, such as upgrading single phase backbone to 3-phase supply could be undertaken in areas that generate important goods or services to Victorians or beyond (such as the dairy industry).
			• Additional three-phase upgrades could be made to most regional or rural communities to enable fast EV charging. However, some SWER customers at the end of long-lines would continue to rely on all plug charging.

Improving power quality

Status Quo	Option 1	Option 2	Option 3
• Power quality issues can be caused by external factors that disrupt power momentarily, for instance animal life causing wires to connect, or tree branches coming into contact with power lines. They may also be a result of electricity-related factors, such as high amounts of solar exports increasing voltage levels or high amounts of motorised capacitys, such as farm pumps, causing harmonics issues. • For customers, poor power quality can result in appliances or equipment not functioning as intended or prematurely failing. Most commonly, this could be flickering lights or appliances. • Dairy farming plants and other agricultural or manufacturing production processes can be particularly sensitive to power quality disruptions. These disruptions may result in system re-starts with production delays and spoilt product. • Today, our voltage quality performance meets the compliance obligations set for us by the Essential Services Commission. That is, we maintain voltage levels between 216–253V for 98% of the time for 95% of customers.	• Only minimal investment would be undertaken to directly target improved power quality as a primary objective. However, power quality improvements would be driven by investments seeking to better enable EV charging or more solar exports.	• Some targeted investments would be developed to address areas of ongoing poor power quality. This could include harmonic filters, voltage regulators, and batteries (to 'ride-through' momentary outages). These investments would improve power quality outcomes for worst-served customers. • Broader power quality improvements would continue to be driven by investments seeking to better enable EV charging or more solar exports.	• More targeted investments would be developed to address areas of ongoing poor power quality today, as well as proactively investing in areas where power quality concerns are likely to arise in the future. • Broader power quality improvements would continue be driven by investments seeking to better enable EV charging or more solar exports.

Improving regional and rural equity

Status Quo	Option 1	Option 2	Option 3
• Under the existing regulatory framework, the benefits of any proposed investment are determined based on the expected 'energy-at-risk', multiplied by the value of customer reliability (VCR).(1) Together, these represent the dollar-value of electricity that would not be supplied to customers, either as a result of our infrastructure failing and/or not being constructed in the first place. • For upgrades to long-rural feeders, the energy-at-risk is typically low. This is because these lines have comparatively fewer customers than urban or more densely populated areas. • What this means for customer outcomes is that large-scale regional and (particularly) rural upgrades—such as three-phase supply upgrades—are likely to only occur under government mandated works programs (as has occurred previously for specific safety initiatives), or where the customer themselves are prepared to fund the cost of the works. • The impacts of lower access to electricity infrastructure are expected to increase as part of the energy transition.	• We have previously submitted business cases to the AER for targeted regional upgrades in South-West Victorian. These investments were based on broader economic benefits (such as their contribution to regional economic growth). These benefits were not recognised by the AER. • We could seek further customer and stakeholder support for regional upgrades, and re-propose similar investments.	• Recognising the challenges associated with option 1, an alternative approach could be to support changes to the AER's calculation of VCRs to more explicitly recognise the value regional and rural customers place on their electricity supply. • The AER's existing VCRs do provide separate values for residential and businesses, and have some geographic differences, but these are based more on climate zones. • The AER is reviewing its approach to setting VCRs by the end of 2024.	• The introduction of a minimum service option (or similar). Recognising the challenges associated with option 1 and 2, an alternative approach could be to support changes to the regulatory framework to better accommodate regional and rural customer needs.

Enhancing the planned outage process (e.g. outage restoration times) and managing customer vulnerability

Status Quo	Option 1	Option 2	Option 3

• In the lead up to a planned outage, notifications are triggered 8 days out from the planned outage. A hard copy notification is received 4 days out from planned outage.
• Digital reminder notices are provided one day out and cancellation notification issued as soon as practical if a decision is made to cancel an outage.
• Life support customers (LSC) are called ahead of planned outages to confirm they have received the notification and have contingency plans in place.
• Customers are able to nominate their preferred communications channel. Customers may also add other household members to receive notifications and updates.
• We scope pre-outage, aimed at reducing the impact of outages. These assessments include:
  • whether a generator could reduce the outage area
  • whether mid span isolators can be deployed (mid span isolators isolate sections of the network)
  • whether network parallels can be put in place as backup
  • Scoping considers key community infrastructure such as schools, hospitals, aged care facilities etc. i.e. outages affecting schools are typically reserved for weekends
	• Earlier notification of planned outages e.g., prior to the existing 4 business day requirement under the Electricity Distribution Code of Practice (EDCoP).
	• Doorknocking impacted homes before electricity is disconnected (as proposed under the Energy Charter).
	• Annual engagement with large customers on preferred outage windows.
	• More planned work being conducted on weekends or after hours.
		• Alternative power supply during planned outages (e.g. deploying MERV/temporary generators, prioritising critical services or vulnerable customers).
		• Provision of regular SMS messages to customers on progress on the completion of the planned outage. Could also be a premium services for impacted businesses.
		• Allow customers a review process that in special circumstances could defer a planned outage for say a major community event.
			• Commit to a mandatory digital notification at 8 days to the customer prior to the planned outage.
			• Improve visibility of the low voltage network to ensure we only notify the customers who will be impacted by the planned outage.
			• A fleet of small home generators (to power a kettle, charge phones etc).
			• Implement large customers preferences on preferred outage windows.
			• We could also consider customer compensation where customer requested outages impact neighbours.
			• Implement requirements to minimise the amount of cancelled planned outages.

and disruption is avoided during NAPLAN testing windows. • Shopping strips are often consulted if their trading hours are impacted by a planned outage.			

Disaster preparation and recovery

Status Quo	Option 1	Option 2	Option 3
Our network is designed to withstand a range of weather extremes. We are also prepared for safe and quick responses when there are network failures. These include, but are not limited to, the following: • design standards that reflect typical climate expectations • frequent and structured vegetation management programs • pre-storm and bushfire-season communication campaigns to promote community readiness • stand up localised response teams in advance of extreme weather forecasts. • staff-sharing agreements in place with other networks to ensure sufficient resources. • built one mobile emergency response vehicle (MERV) which is deployed to communities following/during climate related weather events providing restoration information, light, back up generation and more to support communities	Maintain our existing disaster preparation and recovery measures, but supplement these with the following: • update to design standards and replacement of some assets over time to reflect changing climate conditions. • some targeted network hardening in at risk areas. • increased number of MERV (mobile engagement response vehicle) fleet, supported by trained community liaison officers. • assist in development of community resilience plans in conjunction with high-risk communities. • increase the relevance and personalisation of communications delivered during prolonged outages.	In addition to option 1: • some targeted SAPS and community, grid-connected microgrids. • more targeted network hardening in at risk areas. • larger MERV fleet, supported by trained community liaison officers. • pre-preparing some community hubs in high-risk locations to better support communities in the event of extreme weather. • assist in development of community resilience plans in conjunction with high and medium risk communities.	In addition to option 2: • more SAPS and community, grid-connected microgrids across the State. • more targeted network hardening • build back better – pre-emptive planning that allows targeted hardening at a site when we would need to rebuild anyway. • further improvements to the relevance and personalisation of communications delivered during prolonged outages e.g., this may look like highly relevant and tailored, messages delivered in close to real time, on different channels depending on community preference. • in a widespread event, engagement with most/all community or an emergency community hub through liaison officers with boots on the ground dedicated to that community. • assist in the implementation of community resilience plans • increase maturity of storm consequence modelling

Enabling capacity for export services

Status Quo	Option 1	Option 2	Option 3
• Regional and rural customers have less ability to export their excess solar energy when compared to urban customers. This is because of differences in network capacity, infrastructure, customer density and energy demand, all of which impact the level of investment to enable exports • SWER customers in particular have significantly less ability to export solar due to constraints of this technology • Over time all parts of the network will be become increasingly constrained if the uptake of solar by customers continues • Regulation of solar invertor and communications standards is largely unregulated • Customers who export solar to the grid are not required to pay for the provision of that export capacity	• Introduction of export education programs to support prudent sizing and use of solar exports to all customers. • Enhanced compliance program to ensure all solar installations have compliant invertor and communication settings. • All solar customers are provided the option of either static or flexible export limits: • static export limit for most customers are set materially below the average size (6kW) of typical customer solar systems. • flexible export limits for most customers are designed to allow higher export capacity than the low static limit except during periods of network stress. • Export tariffs are applied to solar energy exported to the network.	• Introduction of export education programs to support prudent sizing and use of solar exports to all customers. • Enhanced compliance program to ensure new solar installations have compliant invertor and communication settings. • New solar customers are provided the option of either static or flexible export limits: • static export limit for most customers are set moderately below the average size (6kW) of typical customer solar systems • flexible export limits for most customers are designed to allow higher export capacity than the moderate static limit except during periods of network stress • Export tariffs are introduced for new solar customers exporting to the grid.	• New solar customers are provided the option of either static or flexible export limits: • static export limit for most customers is set close to the average size (6kW) of typical customer solar systems. • flexible export limits for most customers are designed to allow higher export capacity than the higher static limit expected during periods of network stress. • No export tariff, compliance program or export tariffs.

Sustainable future

Status Quo	Option 1	Option 2	Option 3
• We recognise that we have a corporate-social responsibility to decarbonise for our customers and communities. • We have developed Sustainability Strategy Framework to target a 30% reduction on 2019 baseline emissions by 2030 within our business., We have already reduced our scope 1+2 emissions by 17% on 2019 baseline levels.(1) • Status quo would see us reach our Sustainability Framework emissions target, contribute to Victorian Government emissions reduction targets and continue to connect and host renewable generation.	• Utilise existing depot roof space to proactively install some solar. • Electrify some fleet vehicles, supported by EV charging at most depots. • Develop new depots with net-zero emissions profiles. • Replace high-emission materials with lower-emission alternatives when existing network infrastructure failures (e.g. replace existing network switching devices that use SF6 gas with newer technologies upon failure).	• Proactive investment to reduce emissions in line with Victorian Government emissions reduction targets. • Electrify most fleet vehicles except specialist trucks, supported by EV charging at all depots. • Proactively utilise depot roof space to install significant solar footprint. • Ensure environmentally-friendly material sourcing processes for assets. • Proactively replace some high-emission materials with lower-emission alternatives when existing network infrastructure failures (e.g. proactively replace some existing network switching devices that use SF6 gas).	• Proactive investment to reduce emissions in anticipation of stronger Victorian Government decarbonisation policies. • Electrify all fleet vehicles, supported by EV charging at depots. • Utilise depot roof space to install significant solar footprint. • Install batteries at depots to support solar PV and EV charging. • 7-star buildings and environmentally-friendly material sourcing processes for assets. • Proactively replace all high-emission materials with lower-emission alternatives when existing network infrastructure failures (e.g. proactively replace all existing network switching devices that use SF6 gas).

This table includes the total number of votes for each topic and option from the first round of voting, prior to participants being informed about the cost of each option. Each participant was allowed three votes each, meaning that the total number of votes does not add up to the total number of participants.

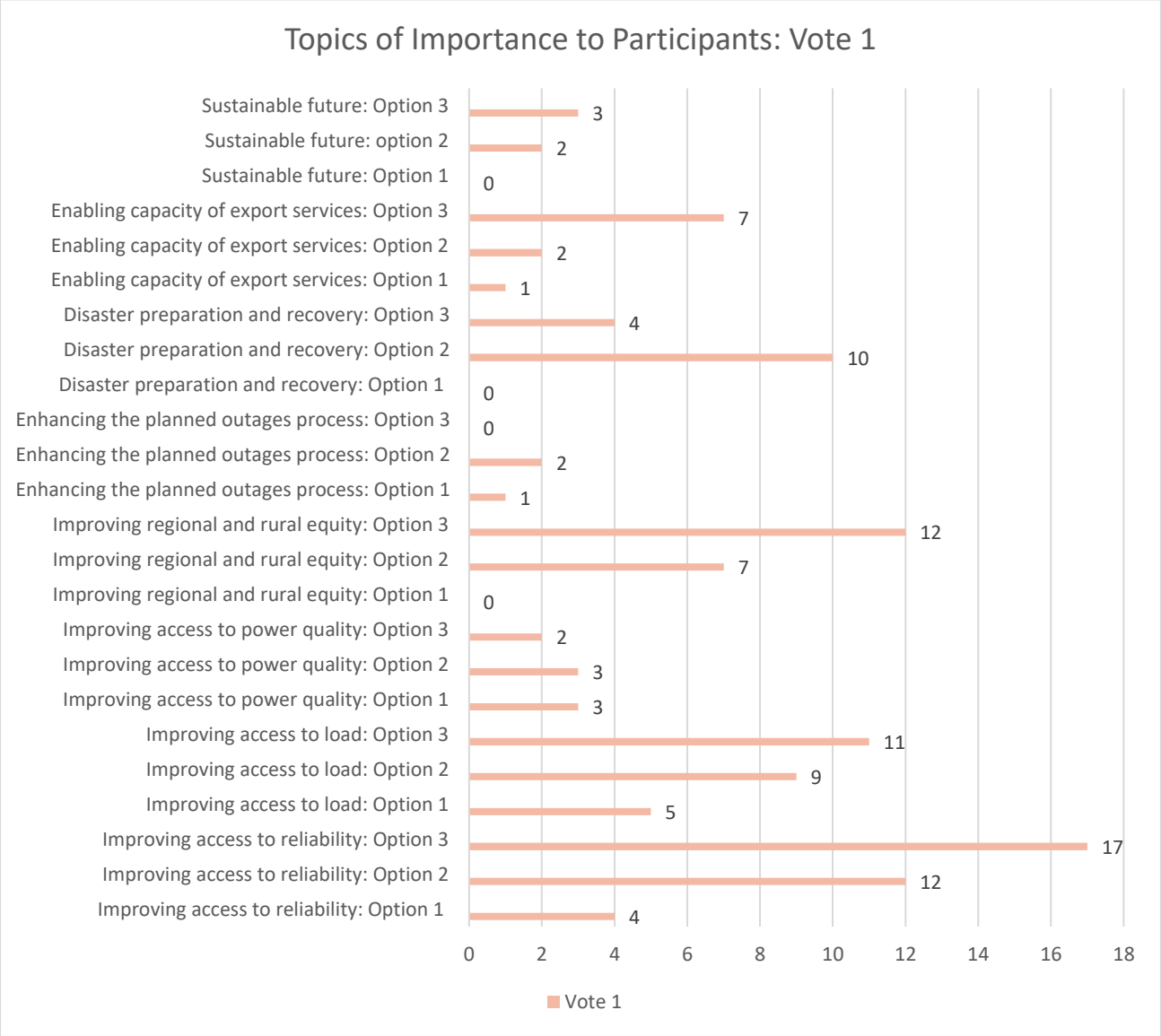


Image above: Rural and Regional Summit with customers of the Powercor network, Powercor stakeholders, and Forethought facilitator.

Forethought®
Outcomes