Test and Validate: Commercial and Industrial Customers Engagement

Produced for: CitiPower, Powercor and United Energy

October 2024

Contents

1. Background

Introduction

Regulatory Reset Proposal Program

In late 2021, Powercor, CitiPower and United Energy (distribution networks) began a comprehensive community engagement program to shape their regulatory proposal. Beginning with broad and wide exploration that identified the key needs and preferences of customers which sit under the four themes:

1. Affordability and Equity
2. Reliability and Resilience
3. Energy Transformation
4. Customer Experience

The community engagement program progressed to a deep and narrow engagement conducted in August and September 2023 that adopted a more targeted approach; exploring, testing, and understanding Commercial and Industrial (C&I) customer preferences and priorities. These in-depth engagements surfaced several key priorities which have been used in the development of the draft regulatory proposal and specific initiatives to respond to these priorities.

Following the release of the draft regulatory proposal on September 10th, the networks have invited its customers to assess the alignment of the proposed initiatives to their needs and preferences shared in previous engagements. This is called the Test and Validate phase where direct feedback on the draft regulatory proposal and the insights gained will guide the refinement of the final 2026-2031 Regulatory Reset Submission.

For a copy of each network's draft regulatory reset proposals please find these linked below:

- CitiPower
- Powercor
- United Energy

The test and validate engagement roadmap can be found on the next page.

Test and validate roadmap

What's left of our engagement journey

The final phase, test and validate, was designed to receive direct input from customers and stakeholders into the final proposal

Phase 3: Test and validate

Provides an opportunity for customers and stakeholders to respond to specific proposed customer commitments and associated bill impacts for the 2026-2031 regulatory reset proposals.

This phase ensures that the proposal aligns with the expectations of customers and stakeholders. Their feedback is considered and validated to make the necessary adjustments.

Consultation meetings with the Customer Advisory Panel (CAP) with our workstreams and executive management team.

Special interest group engagement
- Expert facilitated
- Three-hour roundtables
- In-person
- Online
- Local council groups
- Sustainability groups
- Advocacy groups

SIGs

First Peoples in-depth interviews FP

Quantitative research - survey
- Quantify preferences for the proposed package of customer commitments and associated bill impacts for regulatory reset proposals across all networks.
- Open to all customers
- Regional centres
- Universities

RES CI SMB VUL FP SIGs SEGs AER

Online townhalls
- Open invite distributed across Powercor
- Expert facilitated
- Two hour online webinar
- Presentation of proposed package of commitments
- Q and A

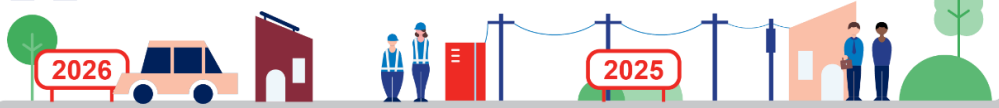
RES SMB

Commercial and industrial in-depth interviews
- Consultation with EUAA
- Seek further feedback from a broad range of commercial and industrial customers from different industries

CI SEGs

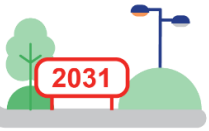
Rural and regional summit
- Joint engagement with farmers for climate action (FCA)
- Understanding of considerations and rationale aligned to regional and rural-specific community and stakeholder preferences

RES CI SMB VUL FP SIGs SEGs AER



Phase 5: Approval and implementation | 2026 to 2031
- The AER gives their draft and final determination on our regulatory reset proposal investment plan.
- Commence the implementation of investment across the network
- Post-implementation review of 2026-2031 reset engagement program
- Begin next regulatory reset community engagement – exploration

Phase 4: Proposal submission | Jan 2025
- Formalising proposal based on outcomes of the test & validate phase
- Submit the final proposal to the regulator
- AER draft determinations
- Revise proposals
- CAP meetings
- Board updates
- Customer & stakeholders engagement



Key

Customer and stakeholder groups

- RES Representative residential customers (including CALD)
- CI Commercial and industrial customers
- SMB Small to medium business
- VUL Vulnerable customers
- FP First Peoples
- SIGs Special Interest Groups (e.g., CFA)
- SEGs Stakeholder engagement Ggoups (e.g., DEECA, AE)
- AER Australian Energy Regulator

Engagement approach

- Ethnographic research
- In-depth interview
- Quantitative analysis
- Deliberative forum / focus group
- Webinar
- Secondary analysis: local, interstate and international
- Desktop research
- Online questionnaire
- Online qualitative boards
- Engage other utility orgs.

CitiPower Powercor Australia united energy | Forethought Outcomes

Involvement of Forethought®

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

Forethought has significant experience in the energy industry, including conducting customer and stakeholder research and engagement with organisations across the full value chain, including electricity generation, distribution, transmission and retail services. It partners 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 utilities, as well as research and engagement capability to independently design and facilitate engagement forums and objectively report back on the needs and preferences of customers across the network.

Engagement Context

Potential influences prior to and within the consultation period included events that took place in both the lives of customers and within the wider electricity sector. We hypothesise these events impacted customers' preferences and perceptions.

Some customers referenced several of these events throughout the discussions at the roundtable:

2023

- Continued cost of living increases for Victorians announced in July 2023 with over a million households hit with power bill increases of up to $361 a year.[1]
- The State Electricity Commission was reinstated in October 2023 and is set to lead Victoria's renewable energy transition across the next 10 years.[2]
- 117 councils around Australia declared their regions in states of climate emergency in response to global climate change impacts and commitments to restore a safe climate by transforming the economy to net zero emissions.[3]
- War in Ukraine and the Russian invasion impacting Australian energy prices.[4]
- Gas prices were expected to increase considerably as the updated Gas Substitution Road Map forecasted decreasing production and pressure to switch to electricity.[5]

2024

- Severe storms across Powercor and United Energy networks on 13th February 2024, and October 2020 that resulted in a significant number of customers off supply.[6,7]
- The Essential Services Commission decided to reduce the base rate for solar feed-in tariffs by 32%, to 3.3 cents a kilowatt-hour.[8]
- Victoria's gas distribution networks could no longer provide rebates or incentives to purchase new gas appliances, following the plan from the Gas Substitution Roadmap Update in December 2023.[9]
- Most Victorians would consider replacing a few gas appliances while just 52% said they would consider disconnecting from gas completely. Meanwhile, almost 90% were using gas appliances and supply gaps continue to increase. Rebates under the Victorian Electric Upgrades program began at the start of 2024 to help houses move away from gas.[10]
- Jemena released its 2026-31 Electricity Networks Draft Plan and Network Resilience Addendum in early September. [11]
- Coalition's nuclear plan is expected to add an additional $665 a year to the average residential power bill based on estimated costs of six overseas nuclear projects. [12]

Note: References are reflected in the appendix.

2.
Program Overview
Overall Objectives & Approach

Objectives

The Commercial and Industrial Engagement in the Test and Validate phase built on exploratory and targeted research conducted in the previous phases. This reflects the networks genuine commitment to develop a proposal that is anchored in customer needs and preferences for the immediate and longer-term future of the network.

This Test and Validate: Commercial and Industrial Engagement 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

- Understand current and emerging issues for commercial and industrial (C&I) customers.
- Gather detailed insights from C&I customers on the proposed initiatives and their associated impacts for the 2026-2031 draft regulatory reset proposals.
- Understand support levels for the overall proposal.
- Understand support levels on power quality initiatives and expenditure.
- Understand support levels on tariff structure, Winter peak demand charge and demand management initiatives.

Building on Broad and Wide and Deep and Narrow Engagement Phases

This program builds on the two previous phases of broad and the deep engagement with customers across all three networks. Key insights from the broad and wide, and deep and narrow phases, were used to inform the design and content of these engagements. Key insights that Commercial and Industrial customers prioritised during the subsequent engagement phases included:

1. **Affordability**:
   - Information on the current network tariff structures to be easier to understand and more accessible
   - A horizon of electricity cost changes (annual increase/decrease) for your business budgeting

2. **Reliability, safety and resilience:**
   - The networks to provide capacity and ensure consistent power quality, to better support your operations
   - Work with C&I customers to better prepare for extreme weather events, as well as minimise the impact of these extreme weather events
   - Manage the network safely, and in accordance with compliance obligations

3. **Energy transition:**
   - Greater flexibility to vary demand to complement your operating models
   - Be rewarded for behaviour which assists the network
   - Expect the networks to lower carbon emissions from the provision of your electricity supply

Above all topics discussed throughout the earlier engagement program, power quality was consistently discussed by C&I customers as a top priority for improvement.

Approach

Consideration was given to recruit participants from a diverse cross-section of the community and industries (across the three networks CitiPower, Powercor and United Energy). A diverse mix of commercial and industrial customers from varying industries was sought, in addition to varied connection types (e.g., high voltage, low voltage and sub-transmission customers).

Participation

Customer Group	Engagement	Consultation Date and Time	Number of Attendees
All commercial and industrial customers or advocates	Online 45-minute in-depth interviews	9 September – 8 October	n=13
Commercial and industrial manufacturers from Greater Shepparton area	Committee for Greater Shepparton (C4GS) manufacturers Online member meeting	24 September 9:15 am – 10 am	n=18
EUAA members	Online member feedback meeting	19 September 2pm – 3pm	n=8
			Total = 39

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 C&I customers, C&I representatives and community organisations. These invites were sent to customers by CitiPower, Powercor and United Energy.

2. CitiPower, Powercor and United Energy engaged Energy Users Association of Australia (EUAA) to set up a consultation with its members. The invitation to join this meeting with the networks was extended to all members in Victoria.

3. The Committee for Greater Shepparton (a not-for-profit, member funded advocacy organisation) provided significant support in allowing Powercor to host a discussion with the group's members during their monthly manufacturers meeting.

Methodology

Across engagements and where possible for time, four key topics were the focus of discussions, and the methodology employed for this encompassed three primary components:

1. **Current and emerging issues** – An opportunity for C&I customers to share what was top of mind for them now and going forward
2. **Overall proposal** – Discuss the draft regulatory proposal on a page, highlighting the broad investment areas of the 2026-2031 reset period
3. **Power quality** – Vegetation management, harmonics, asset management, and network augmentation
4. **Tariffs** – Tariff structure, winter demand charge and Piclo demand management

1. In-Depth Interviews

In-depth interviews were conducted with C&I who expressed interest, as well as organisation representatives to dive deeper into stakeholder feedback. These interviews provided customers with a platform to delve into their individual energy requirements in detail and provide direct feedback on the draft regulatory proposal and specific initiatives. The range of roles of stakeholders included: General Manager of Customer Growth and Engineering Officer for several water utility companies, a National Telecommunications Utility Manager Principal, CEO of manufacturers committee, a university Building Services Manager, a Head Of Energy for a Victoria wide food retail chain, a General Manager of Facility and Design for a food processor, an Electrical Instrument Service Lead, and a General Manager of a brick manufacturing organisation, amongst others.

2. Energy Users Association of Australia (EUAA) meeting

Powercor, CitiPower and United Energy held a one-hour engagement with the EUAA and their members to share and discuss the draft regulatory proposal. Members of this group included infrastructure and capital works manager, sustainability and energy manager, head of government relations and advisory, head of strategic energy management, head of energy for a large Victoria wide supermarket chain, amongst several others that operate within and across the three networks. Representatives from the distributors presented an overview of the draft proposal and price changes; before providing individual presentations on power quality and vegetation management, network support services, the energy transition and tariff structure. This engagement allowed EUAA C&I members to provide direct feedback on the overall proposal and the specific initiatives highlighted.

3. Committee for Greater Shepparton (C4GS) Manufacturers Meeting

Powercor was invited by C4GS CEO, Linda Nieuwenhuizen, to attend and discuss the draft regulatory proposal at one of their monthly manufacturer meetings. Members of this group included manufacturers, food processors, dairy processors and a First Peoples energy retailer, and others from the Greater Shepparton region. This meeting provided the opportunity for Powercor to hear directly from C&I customers in this region about what current and emerging energy issues they were facing and how this impacts their day-to-day operations. Additionally, it provided a space to share what proposed initiatives Powercor has included in the draft regulatory proposal addressing the primary concern for most of these customers – power quality.

IAP2 Spectrum

The level of customer participation in this program was intentional and is highlighted in our depiction of the IAP2 Spectrum shown below. This consultation falls within the 'involve' classification on the IAP2 Spectrum. Customers were involved in assessing the draft regulatory proposal at an overall level, along with specific initiatives that would have an impact on Commercial and Industrial customers, shaping the direction of focus for Powercor, CitiPower and United Energy when refining the final proposal.

IAP2 Spectrum of Public Participation[13]

	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-making process including the development of alternatives and the identification of the preferred solution.	To place final decision making in the hands of the public.

3. Executive Summary

Executive Summary

This report presents feedback from the test and validate phase of CitiPower, Powercor, and United Energy's engagement with Commercial and Industrial (C&I) customers on the draft 2026-2031 regulatory reset proposal. The engagement explored key areas of interest, including current and emerging issues, the overall proposal, power quality, tariffs, and demand management. While C&I customers are grouped into a single cohort, the findings reveal their diverse needs and the interest for tailored solutions.

Current and emerging issues
Energy reliability and power quality emerged as top priorities, with disruptions—no matter how brief—leading to operational and financial consequences. Many businesses invested in backup systems like batteries and generators, but these were seen as temporary measures. Although decarbonisation was a key goal, most organisations prioritised operational continuity and reliability over long-term sustainability efforts.

Overall proposal
There was broad support for the proposal's focus on infrastructure upgrades to enhance reliability and integrate renewable energy. However, some respondents raised concerns about the lack of clear targets and defined priorities for resource allocation, particularly in critical areas such as grid constraints, growth infrastructure, and extreme weather resilience.

Power quality initiatives
Power quality initiatives, such as asset replacement, harmonics management, and vegetation control, were welcomed. Customers highlighted the need to ensure voltage stability, particularly for sectors relying on sensitive equipment, and called for clearer implementation plans to monitor progress and outcomes.

Tariffs and demand management
Feedback on tariffs and the winter peak demand charge was varied. Many participants felt insufficiently informed about the overall tariff structure, limiting their ability to provide detailed feedback. While the fairness of the winter peak demand charge was debated, some businesses with inflexible energy needs viewed it as impractical. However, a few respondents recognised its potential to address peak demand challenges.

This feedback will inform the refinement of the 2026-2031 regulatory reset proposal to address immediate operational challenges for C&I customers while supporting long-term goals for reliability, sustainability, and cost management.

Note: Throughout this report, the term "the networks" or "the distributors" is used to collectively refer to CitiPower, Powercor, and United Energy when feedback or findings are applicable to all three networks. Conversely, specific network names (e.g., Powercor) are used when the feedback or insights pertain to an individual network alone. This distinction is intended to clearly indicate whether the comments are general or directed at a particular network.

4.1
Topic Deep Dive

Current and emerging issues

Overall Draft Regulatory Reset Proposal

Power Quality

Tariffs: Winter Peak Demand Charge

Demand Management: Piclo

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C&I customer perspective on current and emerging issue

1. Energy supply reliability and quality: A universal priority

For most Commercial and Industrial (C&I) customers, energy reliability and quality are critical concerns, regardless of industry. Consistent energy availability is essential for operational continuity, with even brief disruptions causing significant financial and reputational damage. Sectors that are energy-intensive or operate critical infrastructure, such as manufacturing, utilities, and large-scale educational institutions, are particularly affected. In response, many organisations are investing in backup systems, revising energy strategies, and demanding more reliable solutions from distributors.

A. Operational continuity and downtime avoidance

For these sectors, operational continuity hinges on reliable energy. Industries like manufacturing, agriculture, and water management depend on uninterrupted energy to keep production lines and services running smoothly. Disruptions can halt operations, damage equipment, delay services, and increase costs, making reliability essential to maintaining efficiency.

Key insights:

- **Energy-intensive operations**: Manufacturing plants, food processors, and water utilities operate highly energy-intensive processes that were vulnerable to even brief power outages. In many cases, these organisations reported experiencing operational delays, equipment malfunctions, and significant financial losses when energy supply was interrupted, even for short periods.

- **Critical infrastructure**: Organisations managing essential services, such as water distribution, depended on the continuous operation of large-scale systems like pumps, which supply water to and manage sewage systems to vast regions. Disruptions in energy supply to these systems not only affected the organisation itself but also had significant downstream impacts on customers and communities that relied on uninterrupted access to essential services.

- **Research and technology operations**: Institutions like universities, which house sensitive research equipment, were particularly vulnerable to power reliability issues. Voltage sags and power fluctuations can cause major disruptions to research, requiring costly resets and resulting in lost productivity. Sometimes putting at risk long-standing research (i.e. research housed in large refrigeration for upwards of 30 years).

B. Impact of momentary outages

Respondents across all sectors emphasised that even short-term outages—lasting only seconds or minutes—can lead to significant problems. These momentary outages, often referred to as “voltage sags” or “momentary interruptions,” were highly disruptive and posed a serious threat to business operations.

Key insights:

- **Financial and operational costs**: Organisations reported that momentary outages caused financial losses due to halted production lines and system resets. For industries like manufacturing and agriculture, these interruptions led to downtime in production, the loss of perishable products, and, in some cases, equipment damage. One respondent noted,

> ***"Over the last 12 months, we've had 119 incidents and six brownouts where we lost full commercial production. Each brownout cost us approximately $20,000 to $30,000 in production loss."*** (Committee for Greater Shepparton Commercial and Industrial customer, Powercor, 2024)

- Beyond immediate financial losses, respondents described delays in fulfilling customer orders and inefficiencies in meeting service delivery targets due to the time required to restart and recalibrate systems.

> ***"We're talking about a second of flicker and seven hours of recovery. We can't afford to lose that kind of time."*** (Committee for Greater Shepparton Commercial and Industrial customer, Powercor, 2024)

C. Investment in backup power solutions

To address the critical need for energy reliability, many organisations had made substantial investments in backup power systems, such as generators and battery storage. These solutions, while effective for short-term outages, were seen as "stopgap" measures that did not address the underlying issue of grid reliability. Most respondents indicated that these systems can only support operations for limited periods, making them insufficient for prolonged outages or brownouts.

Key insights:

- **Investments in backup systems and their limitations**: Several organisations invested in backup generators or battery storage systems to mitigate the impact of short-term outages and voltage sags. These systems helped maintain critical operations during brief disruptions but had notable limitations. Respondents acknowledged that generators required ongoing refuelling, making them resource-intensive if outages extended beyond a few hours. Similarly, battery storage systems offered only temporary relief, as the stored energy was often insufficient to sustain full operations during prolonged outages.
- For example, one company installed a Tesla battery four years ago to reduce disruptions, but still faced significant production losses due to recurring power flickers. While these backup systems provided some level of resilience, they were not permanent solutions for maintaining continuous operations.

> ***"We invested $3.5 million in a Tesla battery, but despite this, we've still faced multiple outages."*** (Committee for Greater Shepparton Commercial and Industrial customer, Powercor, 2024)

- **Prolonged outages as a major risk**: Many organisations highlighted the risk posed by outages that last beyond the capacity of their backup systems. In such cases, operational resilience was compromised, leading to the suspension of activities and an inability to meet service delivery commitments. Respondents expressed concern about the growing frequency of extreme weather events, such as storms, heatwaves, fires and wind which increase the likelihood of extended outages.

> ***"What does that future look like around reliability... particularly as it relates to climate change events?"*** (CitiPower, Powercor and United Energy Commercial and Industrial customer, 2024)

D. Sector-specific challenges with reliability

While energy reliability was a universal priority, certain sectors face specific challenges that exacerbate the impact of energy disruptions. These sector-specific concerns added complexity to the management of energy supply reliability, requiring tailored solutions that address both the immediate and long-term needs of the organisation.

Key insights:

- **Manufacturing and production lines**: Manufacturing facilities face unique challenges in maintaining continuous operations. Production lines were often highly sensitive to power interruptions, requiring full system restarts after even brief outages. The stop-and-start nature of production disruptions created inefficiencies and lead to significant financial losses due to the need to discard unfinished products and recalibrate machinery.

> ***"Micro flicks, anything less than a second, have a significant impact on our operations, causing hundreds of thousands of dollars in lost revenue."*** (CitiPower, Powercor and United Energy Commercial and Industrial customer, 2024)

- **Agricultural operations**: In agriculture, the impact of energy reliability was particularly pronounced in irrigation and water distribution systems. Powering large-scale pump drives, which supply water to agricultural regions, was critical to maintaining crop yields and meeting production schedules. A failure in the energy supply to these systems could result in delayed or missed irrigation, causing significant agricultural losses.

- **Water utilities**: Water utilities relied on a stable power supply to ensure the delivery of water and wastewater services. Disruptions to energy supply could compromise the operation of critical infrastructure, such as water treatment plants and pump stations, affecting both residential and commercial customers. The long lead times and high replacement costs associated with large-scale pump systems further complicated these challenges.
- **Educational institutions**: Universities and research institutions face a different set of challenges related to energy reliability. Voltage sags and power fluctuations affect sensitive research equipment, causing costly disruptions to ongoing research projects in such a way that research data was permanently lost. The downtime required to reset equipment after a power interruption can delay research by hours or even days, resulting in lost productivity and potentially impacting the institution's reputation.

> ***"We have significant risks and liabilities with respect to our research. Some of our research projects are long in the years making, and losing them due to impacts from supply voltage is unacceptable. For example, we have critical equipment like freezers storing samples that go back 20 to 30 years. If these fail during a voltage sag or outage, the loss would be catastrophic, impacting decades of work and significant funding from government and philanthropic sources."*** (University Commercial and Industrial customer, United Energy and CitiPower, 2024)

2. Decarbonisation and electrification: Strategic goals with gradual progress

Although long-term decarbonisation and sustainability remained strategic priorities for the majority of Commercial and Industrial (C&I) customers, these goals had been overshadowed by the pressing need for energy reliability and cost management in the short term. Across various industries, organisations expressed a commitment to reducing their carbon footprint, meeting government-mandated net-zero targets, and integrating renewable energy into their operations. However, achieving these sustainability goals had become a secondary focus due to the operational challenges posed by energy supply instability, rising costs, and grid constraints.

A. Decarbonisation as a medium- to long-term goal

For the majority of organisations, decarbonisation was viewed as an important, yet long-term objective. Respondents generally agreed that transitioning to more sustainable energy sources and reducing greenhouse gas emissions was essential, both for regulatory compliance and for aligning with broader societal expectations around environmental responsibility. However, these ambitions were seen as part of a broader, multi-year strategy rather than an immediate priority.

Key insights:

- **Commitment to net-zero targets**: Several organisations were working towards achieving net-zero emissions by government-mandated deadlines, typically ranging from 2030 to 2050. These targets were often driven by regulatory frameworks, corporate sustainability goals, and pressure from stakeholders and consumers. While the targets were firmly embedded in long-term strategic planning, there was a recognition that short-term progress may be slow.

- **Delay in implementation**: While there was a clear intent to achieve decarbonisation, many organisations were currently delaying large-scale implementation efforts due to more urgent operational concerns. For example, investments in renewable energy projects, such as solar panels or battery storage, had been postponed in favour of initiatives that address energy reliability or cost reduction.

- **Electrification as a decarbonisation path**: A key pillar of decarbonisation involved transitioning from gas-powered systems to electric alternatives. This was particularly relevant for sectors reliant on natural gas for heating or industrial processes. Electrification was seen as a critical step toward long-term sustainability, though implementation was gradual, given the need to balance operational continuity. Despite the intention to electrify, many organisations noted that it was not possible to replace gas entirely to meet their current energy needs and were worried about the rising cost of gas.

- **Pacing of investments**: Sustainability projects, especially those involving significant infrastructure changes, required careful financial planning and tended to unfold over several years. Organisations were making gradual investments in sustainability initiatives with the understanding that these efforts would likely accelerate once immediate operational challenges, such as energy reliability, were managed.

B. Balancing decarbonisation with operational needs

One of the most significant challenges faced by organisations was the need to balance decarbonisation efforts with ongoing operational needs. In industries that were heavily reliant on continuous energy supply, such as manufacturing, food processing, and water utilities, the operational risks associated with power outages or supply instability often outweighed the benefits of immediate decarbonisation.

Key insights:

- **Trade-off between reliability and sustainability**: Respondents consistently indicated that while sustainability goals remained important, ensuring operational continuity through a reliable energy supply was a more pressing concern. In particular, organisations in energy-intensive sectors had made it clear that the pursuit of decarbonisation must not come at the expense of reliability. As a result, many organisations looked to focus on short-term measures to improve energy reliability, even if this would postpone investments in renewable energy.

- **Energy transition planning**: Organisations were aware that the transition to decarbonised operations, such as electrification or the adoption of renewable energy sources, would require significant infrastructure upgrades. Many were still in the planning phase, mapping out how to replace fossil fuel-based systems with sustainable alternatives. The complexity of this transition, coupled with uncertainties around grid capacity and future energy costs, had led to a cautious approach.

- **Gradual approach to renewable integration**: Most organisations expressed interest in integrating renewable energy into their operations but were taking a gradual approach. Solar energy, wind power, and battery storage were frequently discussed options, but investments in these technologies were contingent on resolving immediate concerns, such as the complexity of grid connections and the high upfront costs of renewable infrastructure.

C. Sustainability as a long-term focus

While sustainability efforts were not currently a top priority for many respondents, it remained a key part of long-term business strategies. Several respondents emphasised that their organisations were committed to reducing carbon emissions in alignment with government-mandated targets. These efforts were seen as necessary to meet net-zero deadlines between 2030 and 2050, though short-term progress was often delayed due to operational challenges such as energy reliability and rising costs.

Key insights:

- **Regulatory compliance**: Respondents noted that regulatory frameworks were driving their long-term decarbonisation plans. Although many organisations have not made immediate progress, they were beginning to integrate sustainability goals into their operations to ensure compliance with future regulatory requirements.

D. Grid constraints hindering renewable energy adoption

Grid constraints and delays in securing connections for renewable energy projects were major obstacles to organisations' decarbonisation efforts. Customers, predominately from the Powercor region, felt the process of securing agreements to connect renewable energy systems (e.g., solar, battery storage) to the grid was slow, complex, and expensive. Consequently, a bottleneck emerged that slowed the integration of renewable energy into operations, as organisations were hesitant to move forward with large-scale renewable energy investments until these challenges were resolved.

Key insights:

- **Grid connection challenges**: One respondent, an energy consultant for C&I customers and councils who was looking to improve their energy efficiency, carbon reduction, and waste management spoke on the behalf of several organisations and reported that the process of securing grid connections for renewable energy projects was time-consuming and expensive. The approval process could take years, and organisations were often required to make substantial investments to meet grid requirements. This had created hesitancy among businesses to move forward with renewable projects, even when they had the capital and intent to do so.

- **Uncertainty around grid capacity**: Respondents expressed concerns about whether the existing energy grid could handle increased demand from electrification and renewable energy integration. There was a shared uncertainty about the grid's ability to support the anticipated rise in electricity usage as businesses shifted away from fossil fuels toward more sustainable energy sources.

> ***"We are looking at electrifying more of our operations, but we are unsure whether the network can handle that additional load."*** (CitiPower, Powercor and United Energy Commercial and Industrial customer, 2024)
>
> ***"We plan to increase our production by 50 million litres per year over the next five years, but with the current power situation, we don't know if that's feasible."*** (Committee for Greater Shepperton, Commercial and Industrial customer, Powercor, 2024)

- **Renewable energy as a long-term solution**: Despite these challenges, several organisations viewed renewable energy as the solution to their sustainability goals. Respondents indicated that while grid constraints were a significant barrier today, they hoped for improvements in grid infrastructure and policy changes to facilitate greater renewable integration in the future. Once these bottlenecks Were resolved, organisations would then be able to accelerate investments into solar, wind, and battery storage solutions.

Case study: Grid constraints impacting renewable energy projects *(Powercor region*)

An energy consultant for several large food manufacturing companies across Victoria, which aimed to adopt renewable energy solutions such as solar arrays or biogas systems, highlighted that they had encountered significant barriers due to grid constraints. In particular, the process of securing generator agreements, essential for connecting these projects to the energy network, had become increasingly lengthy, complex, and costly.

These agreements typically took three to four years to finalise, requiring businesses to meet stringent technical requirements and navigate evolving regulatory conditions. The delays, coupled with costs in the hundreds of thousands of dollars, created significant financial and operational challenges.

> ***"The grid is becoming more complex and more constrained... [there's] so much uncertainty and doubt and cost and time that it's really hard to work with."*** (Energy consultant for Commercial and Industrial customers, all networks, 2024)

- The outdated grid infrastructure struggled to meet the growing demand for renewable connections, leading distributors to shift approval conditions mid-process. This uncertainty discouraged businesses from investing in renewable projects until they had clear terms, resulting in missed opportunities for cost savings and decarbonisation efforts.

> ***"You can roll the dice and do it [without an agreement], but.. if you've already built the system, you've put your neck on the line and you're stuck."*** (Energy consultant for Commercial and Industrial customers, all networks 2024)

Without predictable processes and necessary grid upgrades, organisations remained hesitant to move forward with renewable energy projects, slowing the transition to a sustainable energy future.

3. Rising energy costs: A growing concern

The increasing cost of energy was a significant challenge consistently raised by commercial and industrial customers across sectors. High energy consumption, price volatility, and costly infrastructure investments were placing mounting pressure on operational budgets. Organisations, particularly those with energy-intensive operations, were struggling to manage rising costs while balancing short-term needs with longer-term goals.

A. Volatility in energy pricing

Customers reported that volatile energy prices were making it difficult to forecast costs and plan budgets effectively. Unexpected tariff increases and changing market conditions created instability, especially for organisations with high energy demands. Many respondents also expressed frustration with unpredictable contract renewals, which often exposed them to price spikes beyond their control.

Key Insights:

- **Tariff increases:** Several respondents noted significant tariff hikes over the past 12 months, leading to higher operational costs and reduced profit margins. For businesses already operating on tight budgets, these increases had forced difficult trade-offs, with some delaying other critical investments.

- **Financial instability from pricing fluctuations:** Respondents highlighted the difficulty of managing costs in an environment of financial uncertainty, where energy contracts expire, and prices shift unexpectedly.

B. Increasing costs of energy infrastructure and projects

Organisations also shared that the cost of infrastructure investments was rising, often exceeding initial budgets. These projects included upgrades to energy systems, renewable energy installations, and grid-related improvements, all of which had encountered cost overruns and delays.

Key insights:

- **Cost overruns:** Many respondents cited examples of energy infrastructure projects where final costs far exceeded expectations. In some cases, project budgets had doubled due to unexpected grid connection challenges and regulatory changes, requiring additional funding.
- **Investment delays:** Rising costs have prompted some organisations to postpone investments in projects such as solar arrays and energy-efficient technologies. Several respondents expressed the need to reassess financial priorities until conditions became more favourable.
- **Grid constraints and costs:** Grid-related challenges have added further complexity, with outdated infrastructure unable to accommodate new projects efficiently. Organisations were also being asked to bear a share of grid upgrade expenses, adding to their financial burden.

> ***"A project we estimated at $250,000 ended up costing $500,000—forcing us to seek additional funding."*** (Water utilities Commercial and Industrial customer, Powercor, 2024)

C. Managing costs through efficiency initiatives

Faced with rising costs, many organisations were implementing energy efficiency measures to reduce consumption and manage expenses. Respondents noted that while these initiatives provided some relief, price volatility limited their effectiveness as a long-term strategy.

Key insights:

- **Energy efficiency investments:** Respondents were focusing on upgrading lighting, HVAC systems[14] , and machinery to improve efficiency. While these efforts reduced direct energy use, fluctuating tariffs made it difficult to translate savings into long-term financial benefits.

[14] Heating, Ventilation, and Air Conditioning (HVAC)

- **Demand management:** Organisations noted an increased adoption of demand management tools to optimise energy use, particularly by shifting consumption to off-peak hours. These efforts aimed to reduce exposure to peak pricing and take advantage of lower rates when demand was low.

4. Strategic relationships with energy distributors: Opportunities for improvement

C&I customers and EUAA members consistently highlighted the need for deeper, strategic partnerships with energy distributors. Many felt that current relationships were largely transactional, focusing on short-term issues like outages, grid connectivity, and tariff adjustments. They emphasised the importance of proactive, collaborative partnerships to address long-term challenges such as energy reliability, renewable integration, and decarbonisation.

> ***"We just want to hug and hold hands with Powercor and work out something that works."*** (CitiPower, Powercor and United Energy Commercial and Industrial customer, 2024)
>
> ***"We need access to those engineers today to help resolve some of these problems before they affect our bottom lines further."*** (Committee for Greater Shepparton Commercial and Industrial customer, Powercor, 2024)

A. Shift to proactive engagement and tailored support

Organisations sought a shift from reactive, transactional relationships to more strategic and collaborative partnerships. They expressed the need for proactive engagement from energy distributors, particularly in joint planning for infrastructure upgrades and renewable energy integration. Respondents desired more comprehensive involvement to tackle complex challenges around energy reliability and decarbonisation.

- **Proactive support for long-term planning:** Organisations wanted distributors to engage in joint planning efforts, offering guidance and simplifying processes for renewable projects and infrastructure upgrades.
- **Tailored and enhanced customer support:** Respondents called for more relationship managers to improve accessibility and support, with members of EUAA and C4GS noting the need for additional resources to meet growing demands. They also stressed the importance of industry-specific efficiency programs and advanced demand management tools like real-time monitoring to reduce costs and optimise consumption.

B. Transparency and innovation in collaboration

Another major theme was the need for transparent communication and collaborative innovation. Respondents identified gaps in pricing transparency and outage communication, which hindered their ability to make informed decisions. They emphasised that clear communication on tariff structures, reliable outage notifications, and accurate timelines for restoration would help them plan effectively and minimise disruptions.

- **Improved communication:** Organisations wanted more clarity on tariff explanations and outage management to enhance decision-making and operational efficiency.
- **Opportunities for innovation:** Respondents saw significant potential for collaboration on new technologies like energy storage systems, smart grids, and microgrids. They expressed a desire to participate in pilot projects and joint R&D efforts to explore scalable energy solutions and future-proof their operations.

4.2
Topic Deep Dive

Current and Emerging Issues

Overall Draft Regulatory Reset Proposal

Power Quality

Tariffs: Winter Peak Demand Charge

Demand Management: Piclo

CitiPower | Powercor | united energy | Forethought Outcomes

C&I Perspective on Overall Proposal

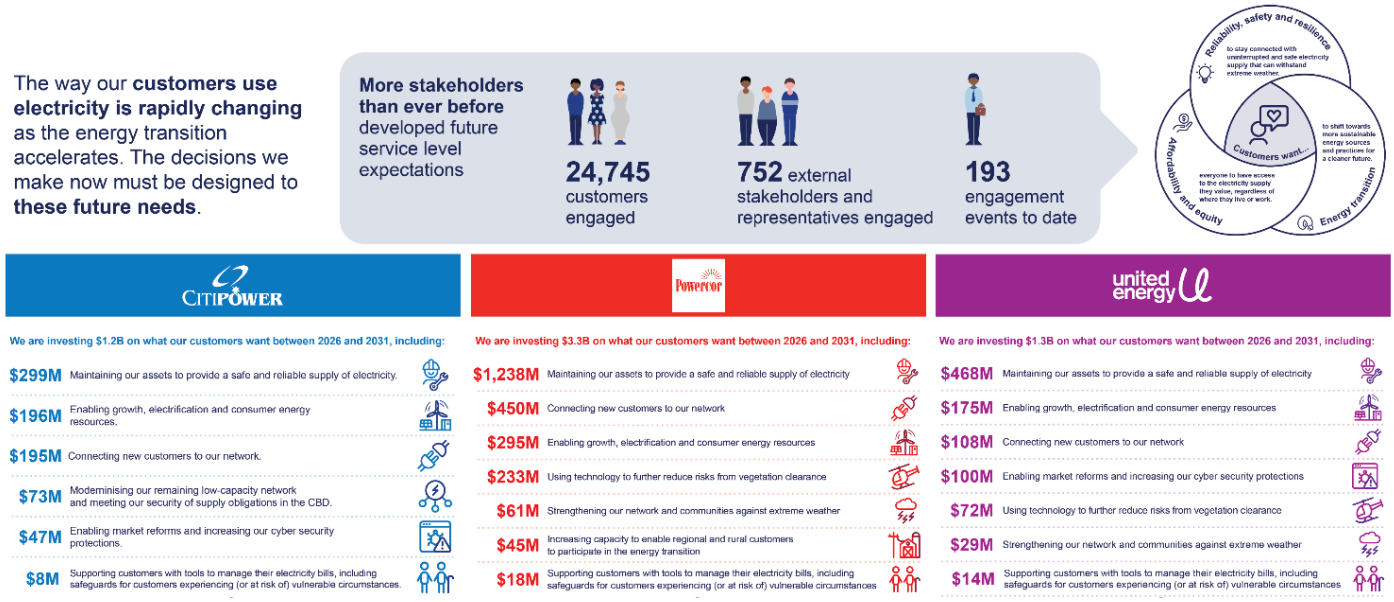

Image above: Overall proposal on a page of each network shown to participants during engagement. Full image is located in appendix.

1. General perception of the proposal

The majority of respondents viewed the network's proposal positively, acknowledging its focus on addressing key business needs such as grid reliability, voltage management, and infrastructure upgrades. However, some respondents indicated that they sought greater clarity and detail about how these investments would translate into measurable outcomes. Given the scope of the proposal and the engagement format, it was challenging to fully convey all aspects, and several respondents expressed an interest in reviewing the complete proposal in greater detail to better understand the allocation of funds and expected improvements.

For example, while the investment amounts appeared significant, respondents mentioned wanting more specific information on how these investments would lead to improvements, especially in reliability and voltage management. One respondent noted that without clear key performance indicators (KPIs), it would be difficult to evaluate the benefits of the proposed investments or justify their costs.

> ***"I'm seeing a lot of dollars but I'm not seeing we're targeting an actual improvement."*** (Water utilities Commercial and Industrial customer, Powercor, 2024)

This sentiment was shared across multiple interviews, where respondents expressed a desire for clearer connections between the investments and tangible improvements in service reliability. They were particularly interested in how these plans would address momentary outages and voltage sags. Additionally, some respondents mentioned they were looking for a more visionary approach, with greater urgency and ambition in developing the network for the future.

While these perspectives reflected cautious optimism, many respondents indicated that with more concrete details and measurable outcomes, they could gain a clearer understanding of the proposal's full potential and its benefits for their organisations.

2. Investment in reliability and voltage management

Respondents overwhelmingly agreed on the importance of improving grid reliability and managing voltage sags, which were seen as critical issues affecting business operations.

For instance, one respondent from the agricultural sector noted that outages had impacted irrigation systems, which are vital for crop production. This respondent stressed that any improvements in grid reliability and voltage management would be highly beneficial to their operations. One respondent highlighted the potential damage to sensitive equipment, particularly in sectors such as water and wastewater management:

> ***"We need to have an understanding of how they're going to fix the power quality issues... because we've had commitments before, and it's hard to see how they are going to meet those."*** (University Commercial and Industrial customer, United Energy and CitiPower, 2024)

While the investment in reliability and voltage management was widely supported, respondents felt that more transparency was needed in terms of how these funds would be allocated and what specific improvements could be expected.

3. Concerns about investment allocation and prioritisation

Although the proposal was generally well-received, many respondents expressed concerns about how the distributors intended to allocate its investment across different initiatives. Some felt that the proposal lacked a clear framework for prioritising investments, particularly in areas where network congestion and growth challenges were most pressing.

For example, respondents in regions experiencing rapid population growth and industrial expansion noted that delays in connecting new developments to the network were already causing frustration among developers and local businesses. One respondent mentioned that Powercor's process for connecting new developments was slower than expected, which posed challenges for regional growth and housing supply. This sentiment was echoed by

others who felt that investments in growth infrastructure should be prioritised to prevent bottlenecks in network expansion.

Additionally, there were concerns that the investment allocated to extreme weather resilience and climate-related improvements, was insufficient given the scale of the challenges faced. For example, one respondent highlighted:

> ***"We could drop $30 million in a single trip event here, so $61 million to upgrade their infrastructure for extreme weather seems like a drop in the ocean."*** (Commercial and Industrial customer, Powercor, 2024)

In contrast, some respondents expressed concern that certain initiatives, such as connecting new customers, were receiving too much attention compared to more immediate needs like reliability and voltage management. Overall, there was a sense that the proposal needed a clearer focus on the most urgent issues affecting C&I customers.

4. Integration of renewable energy

Several respondents emphasised the importance of ensuring that the networks' investments would support the integration of renewable energy sources, such as solar and wind, while also alleviating existing grid constraints that were slowing the pace of renewable adoption.

However, other respondents were concerned that the proposal lacked specific provisions for enabling renewable energy connections, particularly in constrained areas. One respondent suggested that streamlining the approval process for generator agreements would also be beneficial, as the current process was seen as inefficient and slow.

> ***"I would like to see a call out where there was a specified budget for enabling or accelerating renewable connections in constrained areas."*** (Energy consultant for Commercial and Industrial customers, all networks, 2024)

For example, one respondent from the Shepparton business community expressed strong support for initiatives that would enable faster connections for renewable energy projects. They noted that their region had significant solar generation capacity that was not being fully utilised due to network congestion. By addressing these constraints, Powercor could help businesses in the region achieve their carbon emissions reduction targets and support the state's broader renewable energy goals.

Overall, respondents were supportive of the network's emphasis on renewable energy, but they stressed the need for more detailed plans on how the network would accommodate these new sources of energy and alleviate existing congestion.

5. Cost transparency and financial burden

A key concern raised by many respondents was the potential financial impact of the networks' proposed investments on C&I customers, particularly in terms of network and demand charges. Several respondents expressed concern about how much of the investment cost would be passed on to businesses, noting that energy costs were already a significant portion of their operating expenses.

One respondent highlighted that network and demand charges accounted for nearly 50% of their energy bill, and any further increases would be burdensome for their organisation. This concern was shared by other respondents who felt that the networks' needed to be more transparent about how costs would be distributed among customers, particularly those in energy-intensive industries.

> ***"We already face significant network and demand charges, so any increase is a concern."*** (Manufacturing Commercial and Industrial customer, Powercor, 2024)

Additionally, some respondents were worried that the financial burden of the proposed investments might disproportionately affect businesses that rely on large-scale infrastructure, such as manufacturing plants or agricultural operations. These businesses, which are highly dependent on continuous and reliable energy supply, were particularly sensitive to increases in energy costs and were concerned that rising charges could erode their competitiveness.

Respondents emphasised the need for the networks' to clearly communicate the financial implications of its proposal and ensure that the cost burden was distributed fairly across different customer segments. Transparency in cost allocation was seen as critical to gaining the support of C&I customers, who were already facing pressure from rising energy prices.

6. Challenges in communication and timeliness

Communication and timeliness emerged as key issues for several respondents, particularly those managing large-scale energy projects or operations that were heavily reliant on coordinated grid planning. Respondents from industries such as education and manufacturing expressed frustration with the network's communication processes, noting that delays in responses and lack of timely updates had caused operational disruptions.

> ***"It's taking us six to eight months to get answers on power upgrades, and when we do get an answer, it might change again in a couple of weeks."*** (Commercial and Industrial customer, Powercor, 2024)

For instance, one respondent from the education sector described how delays in communication had affected their ability to plan for energy-related projects, particularly during planned shutdowns. The respondent mentioned that they often did not receive timely responses from the networks', which made it difficult to coordinate their projects and ensure that energy disruptions were minimised. This was particularly problematic for organisations conducting critical research, where even minor power disruptions could result in significant financial and operational consequences.

Other respondents echoed these concerns, noting that improved communication and faster response times were essential for businesses that relied on consistent energy supply and effective coordination with the networks. Several respondents suggested that the networks could improve customer service by providing more proactive communication and regular updates on grid developments, particularly during maintenance activities or planned expansions.

> ***"Our interests are their interests and their interests are ours... having that ability to open communication would be valuable."*** (CitiPower, Powercor and United Energy Commercial and Industrial customer, 2024)

In summary, while the proposal's overall direction was supported, there were clear concerns about the timeliness and effectiveness of the networks' communication with C&I customers. Accordingly, communication came up in the overall proposal discussion as customer felt it was necessary to improve for an effective unfolding of the proposal's initiatives over the next five years.

4.3
Topic Deep Dive

Current and Emerging Issues

Overall Draft Regulatory Reset Proposal

Power Quality

Tariffs: Winter Peak Demand Charge

Demand Management: Piclo

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C&I Customer Perspective on Power Quality Initiatives

To maintain power quality and supply reliable, unrestricted power through our network…

Proposal Initiative		Outcome	Cost
Vegetation management		Increase operating costs to meet compliance standards and manage vegetation risks	Total $233M $34M $72M
Asset Replacement		Replace aging assets based on risk assessments to ensure reliability, safety, compliance, and cost efficiency, while adapting to future needs and rising costs.	Total $1,267M $299M $474M
Electrification	• Cost reflective tariffs • Adjusting asset settings • Inverter compliance • Solar pre-approval • Dynamic voltage control • Vic. Emergency backstop mechanism • Hot water load shifting	Building on an existing toolkit includes several low-cost solutions to improve customer power quality to ensure the impact on network tariffs is minimised	Min. additional cost
Augmentation expenditure	All networks • Feeder upgrades • Customer driven electrification • Under frequency load shedding • Communications infrastructure Powercor only • Western growth corridor expansion • SWER upgrades • Northern Murray harmonics management • High voltage upgrades to address low voltage issues CitiPower only • Brunswick modernisations Program • Zone substation capacity upgrades • Laurens street contingent project • CBS security of supply • Yarra Trams Asset relocation United Energy only • Hastings to Rosebud 66KV line	Electrification of gas and transport, managing bushfire risk, maintain security, ensure sufficient communications to support network operation 8	Total $497M $147M $158M

Image above: Power quality initiatives on a page shown to participants during engagement, the prices are colour coordinated to their associated network (red – Powercor, blue – CitiPower, purple – United Energy). Full image can be found in appendix. Participants were also verbally provided additional information on each initiative.

Feedback from respondents suggested a general consensus on the necessity of these investments, but also a desire for more clarity, tailored solutions, and assurance that the costs would be distributed fairly.

Key findings:

1. General support for the distributors' proposed investments

Across the board, the respondents expressed broad support for the investments in maintaining and improving power quality through initiatives like asset replacement, harmonics management, and vegetation control. There was a clear understanding that these investments were necessary to ensure the long-term stability and reliability of the power network.

- **Asset replacement and reliability**: Many respondents viewed the networks' focus on replacing aging infrastructure as essential for maintaining reliability. Stakeholders appreciated that they were taking a proactive approach to preventing future failures by addressing known weak points in the network. Customers referred to "going backwards" if this investment was not made.

> ***"Staying on top of the current asset base and making sure that it's performing as it should, I think that's a good investment."*** (Water utilities Commercial and Industrial customer, Powercor, 2024)

Powercor only

- **Harmonics management**: The Northern Murray harmonics management initiative received strong positive feedback from a water organisation located in the region, that relies on sensitive, high-value equipment. This respondent, along with other stakeholders, appreciated that Powercor was addressing issues like harmonics, which can have a profound effect on the performance and lifespan of industrial machinery, especially in critical sectors such as water utilities and manufacturing. For those respondents who appreciated the initiative but were not located in the affected region, asked why the same investment could not also be made in their region which had similar demands and issues (e.g. Ballarat and Shepparton).

> ***"This is a critical investment for our operations, especially given the sensitivity of our equipment. It's not just about protecting assets; it's about preventing costly downtime."*** (Water utilities Commercial and Industrial customer, Powercor, 2024)

- **Vegetation management**: In regions prone to environmental disruptions such as bushfires, vegetation management was considered one of the most crucial components of the proposal. Respondents with assets and operations in these high-risk areas (e.g. Daylesford and Trentham) saw this as a necessary step to reduce outages caused by falling trees and other environmental hazards. One respondent noted,

> ***"Those investments in those vulnerable areas… particularly around vegetation… I think that's particularly important for our business."*** (Commercial and Industrial customer, Powercor, 2024)

- While other stakeholders didn't feel as though they could make significant comment on this initiative because it was hard to put the spend into perspective without knowing what the direct cost for their business would be.

2. Positive reception to augmentation and expansion plans

Several respondents highlighted their appreciation for the networks' broader augmentation plans, including the Western Growth Corridor expansion. This expansion and network augmentation was seen as critical for supporting growing energy demands in both industrial regions and for the integration of renewable energy sources. Respondents recognised the need for these infrastructure upgrades to future-proof the network and enable their own business growth, and community growth.

> ***"We want Powercor to continue to be safe and reliable, but at the same time, we've got a really strong focus on growth in our region"*** (Commercial and Industrial customer, Powercor, 2024)

Powercor only

- **Western growth corridor expansion**: The plan to expand the grid in growing industrial and commercial areas received support by an energy consultant who worked for a considerable number of C&I customers located in the region and was aware they had faced grid constraints in the past. The respondent acknowledged that this expansion would allow for new renewable energy investments and improve overall energy access. This was critical for these businesses as it would allow for greater means to decarbonise and also expand their business.

> ***"The Western growth corridor expansion will help unlock investment in renewables and help with grid constraints."*** (Energy consultant for Commercial and Industrial customers across Victoria, 2024)

- **Support for electrification and renewable energy integration**: Businesses aiming to increase their use of renewable energy were particularly keen on the networks' efforts to address grid limitations. Several respondents noted that these expansions would allow them to better integrate solar energy or battery storage systems into their operations. This was a sentiment shared by both regional and rural manufacturers and also metro C&I customers.

3. Concerns regarding the specificity of the initiatives

While there was broad support for the proposed investments, several respondents expressed concern about the lack of specificity and measurable goals associated with some of the initiatives. These stakeholders wanted more clarity on how Powercor, CitiPower, and United Energy's proposals would directly benefit their operations, particularly in addressing issues like power disruptions, voltage stability, or equipment sensitivity.

- **Lack of detailed measures**: Respondents, particularly in sensitive industries such as manufacturing and research, felt that the current proposals did not provide enough actionable steps to address their specific power quality concerns. For example, while harmonics management was seen as a positive step, there was a call for more detailed information on how this would be implemented, what the expected outcomes would be and where else it might be implemented.

> ***"We need to know exactly how these initiatives will improve voltage stability. The proposal is too vague on this front, and for us, stable power is critical."*** (University Commercial and Industrial customer, United Energy and CitiPower, 2024)

Desire for specific goals and outcomes: Stakeholders were particularly interested in having clear metrics that would allow them to assess the effectiveness of investments. This was especially true for businesses that rely on continuous operations, such as utilities or food processing facilities. Respondents expressed a desire to see before-and-after comparisons to demonstrate the real impact of these investments.

> ***"The proposal is allocating a lot of funds, but it's not clear how that will translate to reduced outages or improved power reliability."*** (Energy consultant for Commercial and Industrial customers, all networks, 2024)

4. Concerns about financial impact and fairness

Another recurring theme in the discussions was the concern about the financial implications of these power quality initiatives. Many respondents were worried that the costs associated with these investments would be passed on to customers without providing a direct, measurable improvement in power quality. There was a desire for greater transparency around how the cost burden would be shared and whether customers would see a return on their increased expenses.

- **Concerns about rising costs:** Several respondents expressed unease about the potential for increased network charges as a result of the proposed investments. Businesses already managing high operational costs feared that any additional charges could negatively impact their financial performance, particularly if these costs were not offset by clear improvements in service reliability.

> ***"The investments need to take place, but it's how much of that's passed on to us that we're concerned about."*** (Manufacturing Commercial and Industrial customer, Powercor, 2024)

Powercor only

- **Fair cost allocation**: Some stakeholders from rural and regional areas suggested that Powercor should consider a more flexible distribution of the costs, particularly in cases where certain industries or regions would benefit more from specific initiatives. For example, rural areas with vegetation concerns might benefit disproportionately from vegetation management, while urban areas would see more benefit from grid augmentation and expansion. A more flexible pricing model based on the actual improvements each region or sector experiences was suggested.

> ***"There needs to be some fairness in how these costs are shared, and it should be reflective of who is benefiting most from the improvements."*** (CitiPower, Powercor and United Energy Commercial and Industrial customer, 2024)

5. Suggestions for more localised or tailored solutions

Several respondents felt that while the broad initiatives were necessary, there could be more emphasis on localised or industry-specific solutions. Stakeholders, particularly in rural areas or industries with unique energy needs, believed that some of the investments could be supplemented by more innovative, tailored approaches.

Powercor only

- **Localised energy solutions**: Some respondents suggested that more localised solutions, such as behind-the-meter battery storage or off-grid power systems, could complement Powercor's investments. These solutions would allow businesses in remote areas to better manage their energy needs without relying entirely on the central grid. This would be especially beneficial in regions where maintaining network connections is costlier and more prone to outages.

> ***"We're already looking at off-grid solutions in some of our operations. Maybe Powercor could support those efforts as part of their augmentation strategy."***
> (Shepparton Commercial and Industrial customer, Powercor, 2024)

- **Tailored approaches for specific sectors**: Stakeholders in sectors such as research, manufacturing, and utilities suggested that Powercor, CitiPower and United Energy's initiatives could be more tailored to address the specific energy challenges they face. This included more targeted approaches to managing voltage sags, harmonics, and power surges, which were seen as critical to their operations.

> ***"We need more of a customised solution to help with our specific power requirements. A one-size-fits-all approach won't work for industries like ours."***
> (Manufacturing Commercial and Industrial customer, Powercor, 2024)

4.4
Topic Deep Dive

Current and Emerging Issues

Overall Draft Regulatory Reset Proposal

Power Quality

Tariffs: Winter Peak Demand Charge

Demand Management: Piclo

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C&I customers perspective on tariffs: Winter peak demand charge

Proposal to Maintain Current Tariff Structure with an Added Winter Demand Incentive Period (4-7pm) for Emerging Winter-Peaking Areas

- Feedback from C&I customers shows low interest in changes.
- Proposal: Keep current tariff structure.
- Introduce a third incentive demand period from 4-7pm in winter for winter peaking areas.
- Only C&I customers in winter peaking areas will have incentive demand measured in winter.
- Affected customers will receive ample notification before switching from summer to winter period.

CURRENT COMMERCIAL AND INDUSTRIAL TARIFF STRUCTURES

Charge type	Demand[1]	Opt-out[2]
Fixed		✓
Anytime energy		
Peak energy	✓	✓
Off-peak energy	✓	✓
Maximum demand	✓	
Incentive demand	✓	

Image above: Current tariff structures and winter peak demand charge on a page shown to participants during engagement. Participants were also verbally provided additional information on each initiative.

During the EUAA engagement and in-depth interviews, customers were presented with information on their current tariff structures and a potential future option: the critical peak demand charge.

While most Commercial and Industrial (C&I) customers were conscious of energy costs, many had limited involvement in managing tariffs, often relying on consultants or finance teams. Some respondents expressed uncertainty about the impact of the proposed winter peak demand charge, with mixed opinions emerging. Supporters saw it as a means to address peak demand and enhance fairness, while others hesitated due to limited flexibility in their energy consumption patterns.

"There is little clarity, a great deal of confusion in and around tariffs... all we do is we pay the bills". (Ballarat Commercial and Industrial customer, Powercor, 2024)

1. General support for tariff reforms but mixed reception on winter peak demand charge

Across the interviews, there was broad recognition that tariff reform was necessary as energy demand increased with electrification. Although stakeholders across all networks generally understood the rationale behind the winter peak demand charge, there were concerns about its impact on operational costs and load management capabilities.

- **Support for cost reflective tariffs:** In a general sense, some respondents supported the idea of more cost-reflective tariffs that distribute network costs more evenly across peak periods. However, there was hesitancy in supporting the winter peak charge as the best option for cost reflective tariffs. Despite this, there were some who did support the charge. For instance, one respondent noted that the winter peak demand charge was a logical response to the increased winter energy consumption, stating:

> ***"I completely understand why Powercor wants to do this... the winter thing is real."*** (Refinery Commercial and Industrial customer, Powercor, 2024)

- **Fairness concerns:** Despite theoretical support for cost-reflective tariffs, respondents raised concerns about fairness. Businesses with flat energy consumption profiles feared additional costs without the ability to shift their load. Some organisations already managing a summer peak demand charge felt the winter charge was unfair, as they would bear the cost twice, perceiving it as a form of "double-dipping" by the network.
- **Interactive tool to test tariffs**: One EUAA member suggested that the distributors provide a "ready reckoner" or interactive tool that allows customers to input their data and assess the impact of various tariff structures on their energy usage. Drawing on examples from other networks like AusNet Services, the respondent emphasised that such tools—whether spreadsheets or customized models—could help customers optimise their usage and respond to tariff incentives. Even if tariff structures remain unchanged, the respondent highlighted that these tools would enhance customer understanding and engagement.

2. Limited flexibility to shift load and concerns about operational constraints

Many C&I customers highlighted their organisation's inability to shift energy consumption during peak periods. This was particularly challenging for businesses with 24/7 operations or those tied to specific production cycles.

- **Retail sector constraints**: One respondent from the retail sector described how their operations, including refrigeration and air conditioning, make it impossible to reduce load for significant periods without compromising customer comfort and safety. They explained that they could only turn off equipment for very brief periods:

> ***"I can't, I physically cannot. So, when we do a control of our equipment, we turn off refrigeration for example, and the longest and sometimes heating and cooling as well. And the longest we can do that is 6 to 10 minutes… So 'cause, you've got customers opening fridge doors, you've got customers in store. We need to make sure it's a safe and comfortable environment for them. So, for us to control our load for that night peak in winter, it's I just can't do it in meaningful way. So, it's literally just a cost to me."*** (National food retail supermarket chain Commercial and Industrial customer, all networks, 2024)

- An EUAA member who spoke on behalf of another large Victoria-wide supermarket chain shared his experience with AusNet's Critical Peak Demand (CPD) tariff, which provided notifications for peak events, allowing his company to prepare and respond accordingly. They expressed concerns that a daily fixed peak period (e.g., every weekday from 4–7 PM) would not be practical for his operations, which require maintaining food safety standards. They suggested that tariffs with event-based peak charges and advance notifications are more manageable and effective for demand response.

Powercor only

- **Manufacturing sector concerns**: Similarly, respondents from manufacturing, particularly those involved in food processing, voiced concerns about their inability to shift load during peak periods. This sentiment was also shared by a regional brick manufacturer, who had significant production which requires extended hours of energy. A representative from a food manufacturing plant noted that their factory runs 24 hours a day during peak production periods, making it impossible to shift their energy consumption outside of peak hours. They commented:

> ***"When it's on, it runs 24 hours seven days a week... the winter peak charge would be an additional cost to our business that we don't currently carry."*** (National food retail supermarket chain Commercial and Industrial customer, all networks, 2024)

- **More of a penalty than an incentive**: Some C&I customers and EUAA members felt the incentive demand charge resembled a penalty more than an incentive, especially for businesses with limited flexibility. They recommended offering more options to better suit varying business needs. Other customers indicated that aligning network and energy market incentives would encourage more effective responses from C&I customers. These stakeholders acknowledged that while the concept of peak demand charges makes sense for sectors that have some flexibility in their energy use, their businesses are effectively "locked in" to peak periods and thus unable to benefit from potential cost-saving measures.

3. Frustration with existing tariff structures and need for more flexibility

Of the few C&I customers who understood their tariff structures, several were critical of the current tariff structures, which they felt lacked the flexibility necessary for their businesses to operate efficiently. Some indicated that tariff systems were not effectively designed to incentivise load shifting or energy-saving measures, while others highlighted the unpredictable nature of tariff adjustments.

Concerns about flexibility and transparency

- For some respondents, existing tariff systems were not effectively designed to encourage load shifting or energy-saving measures. There was dissatisfaction with the lack of clear price signals to drive efficient energy use. One respondent managing energy across thousands of sites commented,

> ***"We see the tariffs might be the right structure, but the price signals within them don't tell us the networks are serious about it."*** (CitiPower, Powercor and United Energy Commercial and Industrial customer, 2024)

- Stakeholders also raised concerns about the unpredictable nature of tariff adjustments, which made long-term planning challenging. One respondent highlighted their experience of moving hundreds of sites to a specific tariff structure, only to face a sudden 42% price increase, forcing them to revert to their previous arrangement. The need for stability and transparency in tariffs was repeatedly emphasised, with one respondent stating,

> ***"We need to see your price path in terms of what's happening with the underlying tariff so we can plan our business."*** (CitiPower, Powercor and United Energy Commercial and Industrial customer, 2024)

Calls for innovation and flexibility

- Respondents advocated for more innovative approaches to tariff management, particularly as the network transitioned towards greater electrification and renewable energy integration. One key area of frustration was the disincentive to invest in solar and battery storage systems. An energy consultant for C&I customers described the existing system as "broken" and argued,

> ***"Something has got to encourage the absorption of that energy during the day and distribution later on during off-peak times... to go business as usual is a total failure"*** (Energy consultant for Commercial and Industrial, all networks, 2024)

- There was also a push for reforms that would allow businesses and communities to directly benefit from local energy resources, especially in regions like Ballarat. One respondent suggested that local energy trading could reduce demand on the wider grid and improve network reliability, creating additional incentives for tariff reform in this direction.

4.5
Topic Deep Dive

Current and Emerging Issues

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Tariffs: Winter Peak Demand Charge

Demand Management: Piclo

CitiPower | Powercor Australia | united energy | Forethought Outcomes

C&I customer perspective on demand management platform

Non-network Platform **CAPEX $1.8M, $0.9M, $2.8M** **OPEX $3.7M, $1.7M, $5.7M**	Access to non-network markets through our demand management platform

Image above: Piclo demand management platform on a page shown to participants during engagement. Full image can be found in appendix. Participants were also verbally provided additional information on this initiative.

C&I customers expressed varying views on the distributors' Piclo platform, from cautious optimism to concerns about complexity and alignment with their current energy management strategies. Key themes included the importance of simplicity, clear financial incentives, and compatibility with existing systems.

1. Cautious optimism in Piclo but preference for existing providers

A few C&I customers and EUAA members expressed limited interest in Powercor, CitiPower and United Energy's Piclo platform, noting a preference for their existing energy management providers or systems. Many organisations are already working with energy retailers or consultants for demand management and load-shifting strategies, and they did not see a clear benefit in switching to the platform unless it offered distinct advantages.

- **Reliance on existing providers**: Respondents across networks indicated a preference for their established energy management systems. One from Powercor region stated, "We'd probably use our own provider rather than rely on Powercor for demand management." This was a common sentiment, with other respondents mentioning that platforms like the Australian Energy Market Operator (AEMO) might already address similar needs, and that local initiatives should align with broader national frameworks to avoid duplication.

Powercor only

- **Concerns about complexity**: A respondent from Shepparton questioned the practicality of engaging with Piclo, particularly as many businesses have multiple electricity contracts in place. They asked,

> ***"Why would we fund Powercor to do this? Why wouldn't it be an NEM-wide investment in a platform?"*** (Water utilities commercial and Industrial customer, Powercor, 2024)

2. Operational constraints limiting participation

For many organisations, the feasibility of participating in demand management programs such as Piclo is heavily constrained by their operational realities.

- **Inflexible energy usage**: Businesses, especially in manufacturing, reported a binary energy consumption pattern, making it challenging to respond to real-time price signals. One respondent explained,

> ***"The factory's on or it's off. It's quite binary in that respect."*** (CitiPower, Powercor and United Energy Commercial and Industrial customer, 2024)

- **Challenges with load management**: Respondents from industries requiring continuous energy, such as food retail, noted that they could only make short-term adjustments, limiting their ability to leverage platforms like Piclo.

3. High costs of implementing new energy technologies

The high cost of adopting new energy technologies was a recurring theme, as respondents explored solutions like battery storage but faced financial barriers.

- **Cost of energy storage**: One respondent mentioned that while they were looking into battery storage as a potential solution, the cost of such systems remained prohibitively high,

> ***"We are looking at batteries in particular to help that, but the reality is that it's a very significant investment."*** (Food retail Commercial and Industrial customer, all networks, 2024)

- **Infrastructure limitations**: Some businesses pointed out that their existing infrastructure, such as unsuitable roofing for solar installations, limits their ability to participate in alternative energy initiatives.
- **Must be time and cost efficient**: A few respondents voiced the concern that to take advantage of a tool like this they would have either to hire another person to be managing it or free up capacity in some other way of a current employee. However, neither option was particularly attractive without knowing clearly how significant the benefit would be and how challenging of a resource it would be to use.

4. Interest in aligning Piclo with broader energy strategies

Despite the challenges, some respondents saw potential benefits in Piclo if it could align with their broader sustainability and net-zero strategies.

- **Support for net zero targets**: The respondent from Lower Murray Water expressed a cautious interest in Piclo, noting that it could align with their broader strategy on achieving net zero targets. They identified assets such as large-scale generators and innovative pressure-reducing valves that could potentially participate in the demand management platform.
- **Backstop solution for peak demand**: Another respondent viewed Piclo as a "backstop" solution that could help manage peak demand periods and reduce the risk of outages. They recognised that the platform could play an important role in ensuring grid stability during high-demand times, providing financial compensation to businesses that participate.

5. The need for simplicity and clear financial incentives

Several respondents highlighted the importance of simplicity and compelling financial incentives to drive engagement.

- **Simplicity is key**: One respondent who was highly supportive of the platform stressed that simplicity is critical for its success. "The platform needs to be seamless and easy to use," they said, noting that many businesses lack the resources to engage in complex energy markets. This sentiment was echoed by another respondent who suggested a clear mechanism, such as:

> ***"Just a straightforward way of saying, 'if you load shed the next three hours, we'll give you X dollars, do you want to participate?"*** (CitiPower, Powercor and United Energy Commercial and Industrial customer, 2024)

- **Strong financial incentives required**: C&I customers and an EUAA member stressed the need for genuine price signals to justify their participation. As one respondent noted,

> ***"We are interested in demand management, but it has to be a genuine price signal that makes sense to us."*** (CitiPower, Powercor and United Energy Commercial and Industrial customer, 2024)

6. Concerns about low participation and empty market risk

A potential risk identified by respondents is that the Piclo platform could suffer from low participation if the financial incentives are not compelling enough or if the platform is too complex to engage with. Without sufficient participation, the platform may fail to generate the intended benefits, turning into what one respondent referred to as an "empty auction house". One respondent remarked,

> ***"The biggest risk is that it's a non-participated market."*** (CitiPower, Powercor and United Energy Commercial and Industrial customer, 2024)

Case study: Strategic demand management in action

Overview

A telecommunications organisation operating across Victoria demonstrated effective demand management through load-shifting and on-site generation across thousands of sites. Their strategy hinges on receiving clear financial incentives to justify the operational costs.

Key initiatives and capabilities

- **Load-shifting and on-site generation:** The organisation employed batteries and generators at each site, allowing them to manage energy consumption flexibly during peak demand periods. Depending on network needs, they could activate these systems immediately, within 30 minutes, or with 24 hours' notice.

> ***"We have batteries and generation at every site, so we can bring them online to help avoid peak capacity for a network."*** (CitiPower, Powercor and United Energy Commercial and Industrial customer, 2024)

- **Tiered response system:** Sites were categorised as gold, silver, or bronze, depending on how quickly they could respond to demand management requests. This enabled the organisation to prioritise load-shifting based on the urgency and location of network constraints.

> ***"Some sites can come online instantly, others within half an hour or 24 hours' notice."*** (CitiPower, Powercor and United Energy Commercial and Industrial customer, 2024)

- **Financial considerations and price signals:** Despite their proactive strategy, they emphasised the importance of clear financial incentives to justify the costs of load-shifting.

> ***"If you've got genuine constraints, there is potential for us to move load to avoid building more network capacity."*** (CitiPower, Powercor and United Energy Commercial and Industrial customer, 2024)

- **Exploring demand management platforms:** The organisation was open to platforms like Piclo but stressed that participation would depend on whether the platform offered real-time, actionable price signals.

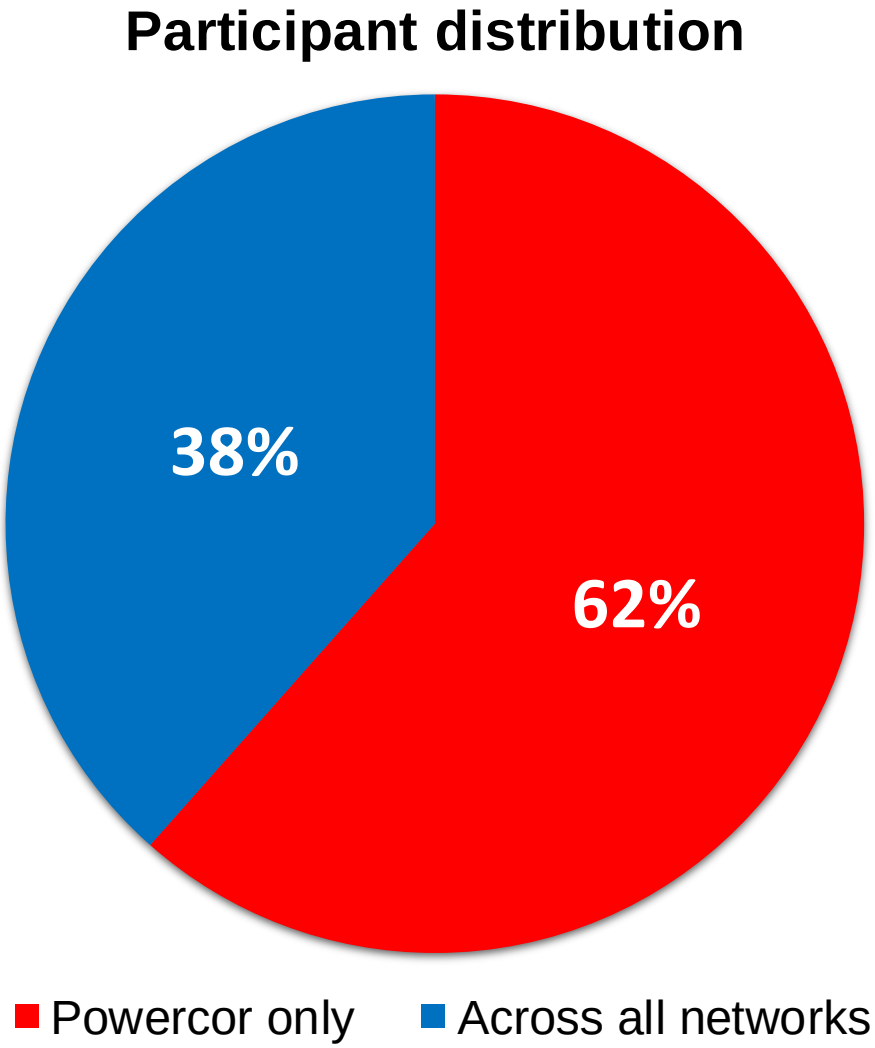
> ***"We are open to participating, but it has to provide clear value and financial benefits."*** (CitiPower, Powercor and United Energy Commercial and Industrial customer, 2024)

Conclusion

This feedback from C&I customers highlights the critical need to balance operational reliability with long-term sustainability and cost management. The insights gathered will inform the refinement of the 2026-2031 regulatory reset proposal, ensuring it aligns with customer priorities while addressing key challenges in energy reliability, power quality, tariffs, and demand management.

6.
Appendix
Engagement Context

C&I customer representation across engagement program



Throughout this report, the term "the networks" or “the distributors” is used to collectively refer to CitiPower, Powercor, and United Energy when feedback or findings are applicable to all three networks.

Conversely, specific network names (e.g., Powercor) are used when the feedback or insights pertain to an individual network alone. This distinction is intended to clearly indicate whether the comments are general or directed at a particular network.

Industry representation across engagement program

Industry representation across engagement program	
Brick and textile manufacturing	Gambling and entertainment
Dairy processing and manufacturing	Gas, equipment and chemicals
Telecommunications	Construction
Tertiary education and research institution	Explosives and fertiliser manufacturing
Food manufacturing	Renewable energy
Food retail supermarket chain	Agribusiness
Water utilities services	Mining chemicals and services
Food processing	Transport
Agriculture	Energy retailer
Waste management	

This table provides an overview of the variety of industries from which C&I customers were recruited from and gave their feedback

Engagement Context References & Others

[1] Herald Sun, June 2023, *Green schemes adding to rising power bills, a*ccessed 19 January 2024, www.heraldsun.com.au/news/victoria/how-much-more-youll-pay-for-power-from-august-revealed/news-story/17187aa2411f753cab740ce1fdf86eaf

[2] Premier of Victoria, October 2023. *The SEC Is Back: Accelerating Victoria's Renewable Future,* accessed 19 January 2024, www.premier.vic.gov.au/sec-back-accelerating-victorias-renewable-future

[3] Cedamia, last updated April 14 2023, *CED regions in Australia*, accessed 19 December 2023, www.cedamia.org/ced-regions-in australia/#:~:text=19%20February%202019%2C%20Maribyrnong%20City,to%20declare%20a%20Climate%20Emergency

[4] Mercer. D, 26 February 2022*, Russian invasion of Ukraine drives up energy costs and Australians will feel the pain*, *ABC News*, accessed 19 January 2024, www.abc.net.au/news/2022-02-26/russia-invasion-of-ukraine-to-drive-up-energy-costs-for-all/100861246

[5] Rooney. K, 14 December 2023, *Bills to soar as Victoria moves away from gas, The Age*, accessed 19 January 2024, www.theage.com.au/politics/victoria/bills-to-soar-as-victoria-moves-away-from-gas-20231214-p5erjv.html

[6] Powercor, 13 February 2024, *Power outage update – 13 February storms,* accessed 27 March 2024, www.citipower.com.au/media-and-resources/media-centre/power-outages-february-13/

[7] United Energy, 13 February 2024, *Power outage update – 13 February storms,* accessed 27 March 2024, www.unitedenergy.com.au/media-centre/power-outage-update-13-february-2024/

[8] Mercer. D, 29 February 2024, *Victoria's rooftop solar feed-in tariffs are falling. Here's why that won't slow the solar juggernaut, ABC News,* accessed 16 May 2024, www.abc.net.au/news/2024-02-29/why-falling-feed-in-tariffs-wont-slow-solar/103528180?utm_campaign=abc_news_web&utm_content=link&utm_medium=content_shared&utm_source=abc_news_web%C2%A0

[9] Gordon. J, 24 April 2024, *Why Victoria's ban on networks offering gas appliance rebates is a win for energy consumers, Institute for Energy Economics and Financial Analysis,* accessed 31 May 2024, https://ieefa.org/resources/why-victorias-ban-networks-offering-gas-appliance-rebates-win-energy-consumers

[10] Tippet. H, 12 April 2024, *Victorian households have the highest gas usage in the country — will they turn it around?, ABC News,* accessed 31 May 2024, www.abc.net.au/news/2024-04-12/victoria-gas-household-electricity-swap-power-bills/103695756

[11] Jemena, September 5 2024*, Draft Plan 2026-31,* accessed 18 October 2024, Draft Plan | Grid Talk

[12] The Guardian, September 20 2024, *Coalition's nuclear plan will add $665 a year to average power bill*, report warns, accessed on 18 October 2024, https://www.theguardian.com/australia-news/2024/sep/20/coalition-nuclear-power-plan-will-add-665-dollars-to-average-power-bill-a-year-report-warns

[13] IAP2, 2018, IAP2 Spectrum of Public Participation, accessed 18 October, 2024, https://iap2.org.au/wp-content/uploads/2020/01/2018_IAP2_Spectrum.pdf

Powercor draft proposal on a page

We are investing $3.3B on what our customers want between 2026 and 2031, including:

$1,238M	Maintaining our assets to provide a safe and reliable supply of electricity
$450M	Connecting new customers to our network
$295M	Enabling growth, electrification and consumer energy resources
$233M	Using technology to further reduce risks from vegetation clearance
$61M	Strengthening our network and communities against extreme weather
$45M	Increasing capacity to enable regional and rural customers to participate in the energy transition
$18M	Supporting customers with tools to manage their electricity bills, including safeguards for customers experiencing (or at risk of) vulnerable circumstances

CitiPower draft proposal on a page

We are investing $1.2B on what our customers want between 2026 and 2031, including:

$299M	Maintaining our assets to provide a safe and reliable supply of electricity
$196M	Enabling growth, electrification and consumer energy resources
$195M	Connecting new customers to our network
$73M	Moderninising our remaining low-capacity network and meeting our security of supply obligations in the CBD
$47M	Enabling market reforms and increasing our cyber security protections
$8M	Supporting customers with tools to manage their electricity bills, including safeguards for customers experiencing (or at risk of) vulnerable circumstances

United Energy draft proposal on a page

We are investing $1.3B on what our customers want between 2026 and 2031, including:

$468M	Maintaining our assets to provide a safe and reliable supply of electricity
$175M	Enabling growth, electrification and consumer energy resources
$108M	Connecting new customers to our network
$100M	Enabling market reforms and increasing our cyber security protections
$72M	Using technology to further reduce risks from vegetation clearance
$29M	Strengthening our network and communities against extreme weather
$14M	Supporting customers with tools to manage their electricity bills, including safeguards for customers experiencing (or at risk of) vulnerable circumstances

Power quality initiatives

To maintain power quality and supply reliable, unrestricted power through our network...

Proposal Initiative		Outcome	Cost
Vegetation management		Increase operating costs to meet compliance standards and manage vegetation risks	Total $233M $34M $72M
Asset Replacement		Replace aging assets based on risk assessments to ensure reliability, safety, compliance, and cost efficiency, while adapting to future needs and rising costs.	Total $1,267M $299M $474M
Electrification	• Cost reflective tariffs • Adjusting asset settings • Inverter compliance • Solar pre-approval • Dynamic voltage control • Vic. Emergency backstop mechanism • Hot water load shifting	Building on an existing toolkit includes several low-cost solutions to improve customer power quality to ensure the impact on network tariffs is minimised	Min. additional cost
Augmentation expenditure	**All networks** • Feeder upgrades • Customer driven electrification • Under frequency load shedding • Communications infrastructure Powercor only • Western growth corridor expansion • SWER upgrades • Northern Murray harmonics management • High voltage upgrades to address low voltage issues CitiPower only • Brunswick modernisations Program • Zone substation capacity upgrades • Laurens street contingent project • CBS security of supply • Yarra Trams Asset relocation United Energy only • Hastings to Rosebud 66KV line	Electrification of gas and transport, managing bushfire risk, maintain security, ensure sufficient communications to support network operation 8	Total $497M $147M $158M

Tariff and demand management initiatives

Proposal to Maintain Current Tariff Structure with an Added Winter Demand Incentive Period (4-7pm) for Emerging Winter-Peaking Areas

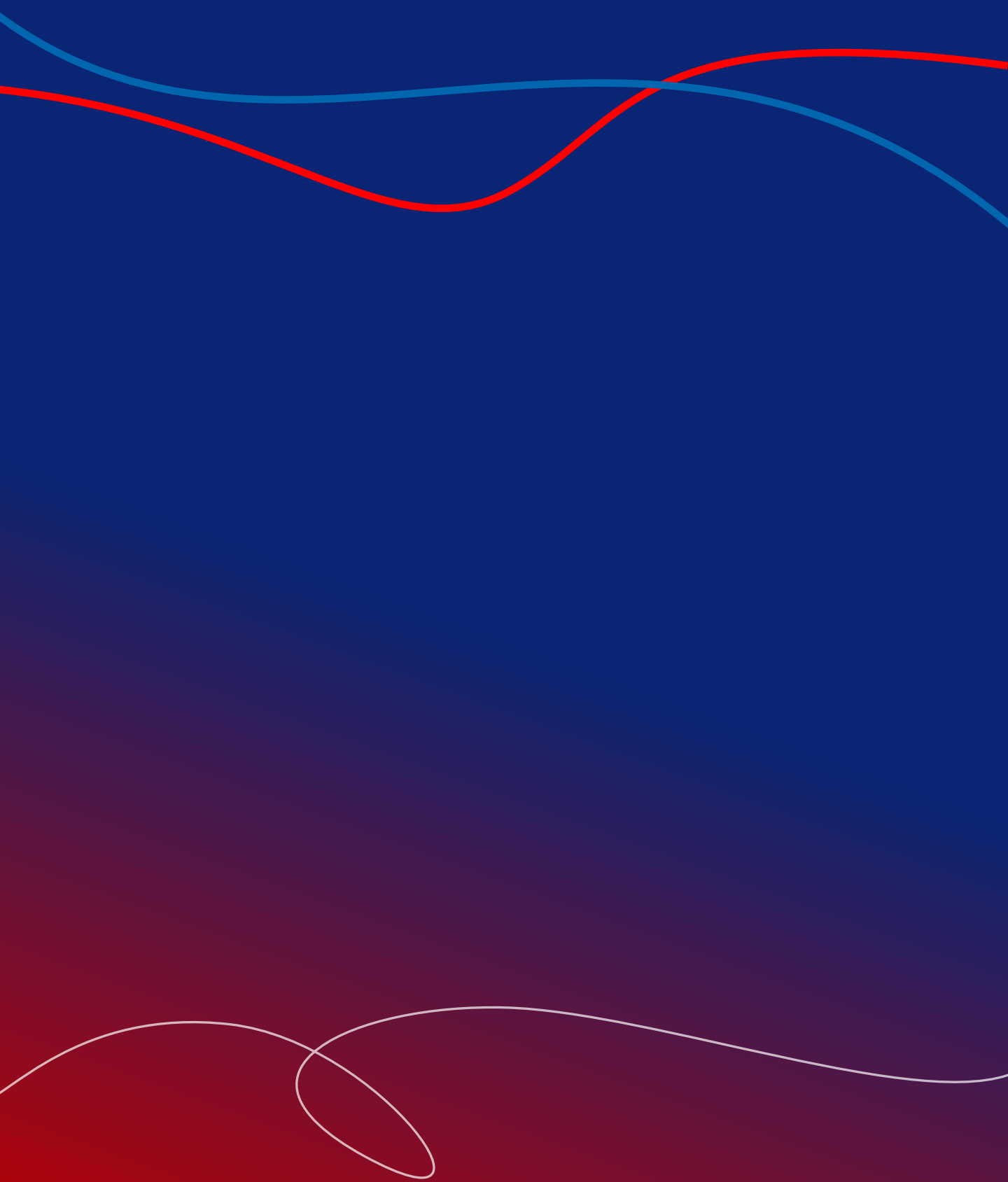
- Feedback from C&I customers shows low interest in changes.
- Proposal: Keep current tariff structure.
- Introduce a third incentive demand period from 4-7pm in winter for winter peaking areas.
- Only C&I customers in winter peaking areas will have incentive demand measured in winter.
- Affected customers will receive ample notification before switching from summer to winter period.

CURRENT COMMERCIAL AND INDUSTRIAL TARIFF STRUCTURES

Charge type	Demand[1]	Opt-out[2]
Fixed		✓
Anytime energy		
Peak energy	✓	✓
Off-peak energy	✓	✓
Maximum demand	✓	
Incentive demand	✓	

Non-network Platform
CAPEX $1.8M, $0.9M, $2.8M
OPEX $3.7M, $1.7M, $5.7M

Access to non-network markets through our demand management platform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