
Investing in the future of your local electricity network

This includes our proposed investment approach for FY2028-2032, and our 2025 Asset Management Plan Update



Orion

Help shape our plans for safeguarding the reliability and building the resilience of your electricity supply

Share your feedback by 30 May 2025

Welcome to Orion's investment consultation and asset management plan update

Last year we signalled our intention to apply for a customised price-quality path for the five-year period from financial year 2028 to 2032. Since then, we've started engaging with our customers, stakeholders and community, and undertaken more detailed analysis of the investments we need to make in this period to continue providing a safe, reliable and resilient energy supply to our growing community.

We have now developed a proposed investment approach for consultation as part of this 2025 Asset Management Plan Update (AMP Update). It outlines why we need a customised price-quality path, its outcomes for customers and its likely costs. We're keen to get your feedback on the proposed approach and invite you to tell us what you think. Your comments will guide us as we develop our customised price-quality path proposal for submission in mid-2026.

In Part 1 we have set out our proposed investment approach for the customised price-quality path period FY28-FY32. In Part 2, our AMP Update builds on the comprehensive Asset Management Plan we published in April 2024.

How to have your say on our proposed investment approach

We are keen to hear what you think about our proposed investment approach in Part 1. You can provide your feedback online, by email and in writing. For details, see page 40 of this document. Please provide your feedback by **30 May 2025**.

There will be more opportunities to have your say in 2025 as we develop our customised price-quality path proposal, and in 2026 when we submit our proposal to the Commerce Commission. Check out: haveyoursay.oriongroup.co.nz/cpp for how to get involved.

Questions to keep in mind

To help us understand your needs and priorities, we have included questions throughout the document that we welcome your feedback on. You can answer some or all of these questions and provide any other feedback you wish to share.

Our updated ten-year Asset Management Plan

Part 2 provides a refresh of our planning outputs, detailing key changes in our thinking and planning since our 2024 Asset Management Plan. It provides the updated ten-year expenditure forecasts, including the five-year customised path period. The forecasts in Part 2 inform our proposed investment approach in Part 1.

Our proposed investment approach



Part 1 contents

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Our proposed investment approach at a glance

Orion owns and operates the electricity distribution network across Central Waitaha Canterbury.



90,000
power poles



14,300 km
of lines and cables

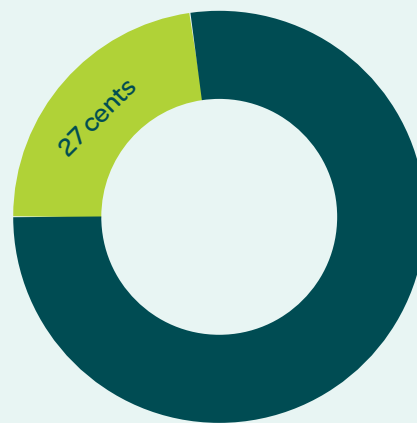


8,000 km
network area



228,000
customers

The cost to provide electricity to homes and businesses is paid for by our customers through lines and new connection charges. Our distribution lines charges typically represent around 27 cents in each dollar of your power bill.



The Commerce Commission determines how much revenue we can earn from lines charges through a default price-quality path. However, this will not deliver the revenue we need to maintain the service levels our customers expect.

We can apply for a customised path if the default does not provide sufficient revenue to deliver the safe, reliable and resilient network you rely on. This document outlines our proposed investment approach to address the unique set of challenges and opportunities our business faces.

Challenges and opportunities



Ramping up our
asset renewals



Increasing our
network capacity



Strengthening
network resilience



Preparing for new
technologies



Improving
efficiencies

From the early engagement we've undertaken, you've told us that a reliable and resilient network is a priority, along with affordability.

Our investment approach

Our aim is to strike a careful balance between cost-effective spending and network performance. Under our proposed investment approach, we would increase investment to provide the services our customers rely on by:

- Renewing ageing assets efficiently
- Maintaining critical equipment at current levels
- Efficiently managing network capacity
- Investing in network resilience
- Investing in digital tools and platforms

This would require a total spend of \$1.73 billion over the five-year period from FY28 to FY32. This is made up of \$1.17 billion of capital expenditure and \$568 million of operational expenditure.

What this means for you

The benefits you can expect from the proposed investment approach include sustained levels of safety and reliability, a reduction in the risk of unplanned outages, and increased network capacity to support future growth. Additionally, resilience will improve, and we will support the decarbonisation of our region.

Delivering these benefits will cost you an additional \$8.00 (+/- \$1.00) a month in distribution lines charges over the five-year customised path period starting 01 April 2027.

How to have your say

We're keen to hear your feedback on our proposed investment approach. Your input will help shape our customised path proposal, to be submitted to the Commerce Commission in mid-2026. We want to know what matters most to you.

The easiest way to let us know your views is via our consultation website: haveyoursay.oriongroup.co.nz/cpp. Here you can learn more and complete a short questionnaire. Please provide your feedback to us by 30 May 2025.

Investing for tomorrow, today
Have your say on the future of our network



Message from the Chair and Chief Executive



Paul Munro
Chair



Nigel Barbour
Group Chief Executive

New Zealand's infrastructure is facing increasing scrutiny as it ages, with a growing population and rising demand putting additional pressure on it. At Orion, we face a unique set of challenges and opportunities, making the need for prudent and efficient investment in our network more critical than ever. We must make decisions in the long-term interest of our customers, as what we do now will shape a positive future for us and for generations to come.

Tēnā rā tātou katoa

It's an exciting time for our region right now, with Ōtautahi Christchurch and Selwyn District continuing to see considerable growth. Looking ahead, our purpose remains the same – to power a cleaner and brighter future with our community.

We are committed to proactive investment, as it is more cost-effective and sustainable in the long term, enabling us to continue making a positive contribution to our region.

As we look to the future, we recognise that electricity will play an important role as the energy source of choice for our community. This means we need to continue to provide a safe, reliable and resilient network, and one that is delivered to you at the lowest possible cost. However, like all infrastructure providers, we are operating in challenging conditions, with the cost of business going up all the time.

The challenges and opportunities ahead are what have led us to progress a customised path application to the Commerce Commission. We need to ramp up our asset renewal programme, increase our network capacity to support our region's growth, and continue to strengthen our network to reduce the risk of major disruptions to the power supply in the event of a natural disaster.

Our journey to get to this point began in the aftermath of the earthquakes, where our primary focus was on restoring the network and supporting the rebuild and recovery. While we were undertaking substantial repairs to the network, there were some elements of our normal work programme that were deferred. That had the effect of keeping prices down post-earthquakes, however it does mean we have to get on with that work now.

With the post-earthquake rebuild of the network largely complete we're now in a new phase of our asset management lifecycle, and it has become clear that the

default price-quality path allowance announced in late 2024 is not going to be sufficient for us to deliver the level of service that our community relies on.

For the last 125 years we've been trusted by our community to connect customers with power and keep the lights on. Now with technology evolving at pace, so too are the needs and expectations of our customers and community.

It is critical we're keeping up with these changes – so we are ready to meet these challenges head on. Underinvesting risks reducing reliability and resilience, making it more expensive to manage and maintain the network in the longer term.

Conversely, by increasing expenditure now, we have the opportunity to preserve the quality of our network, keep costs manageable, and maintain the level of service our customers expect. It also means we can continue to integrate the latest technology into our network, improving our efficiency and responsiveness in the process.

We encourage you to read on to find out more about our plans for investing for tomorrow, today, in Central Waitaha Canterbury.



Paul Munro
Chair



Nigel Barbour
Group Chief Executive

Overview of our network

8,000⁺



Square kilometres of network coverage

5,800



Distribution substations

14,300⁺



Kilometres of lines and cables

228,000⁺



Total customer connections

52



Zone substations

4,000⁺



New customer connections a year

90,000⁺



Orion power poles

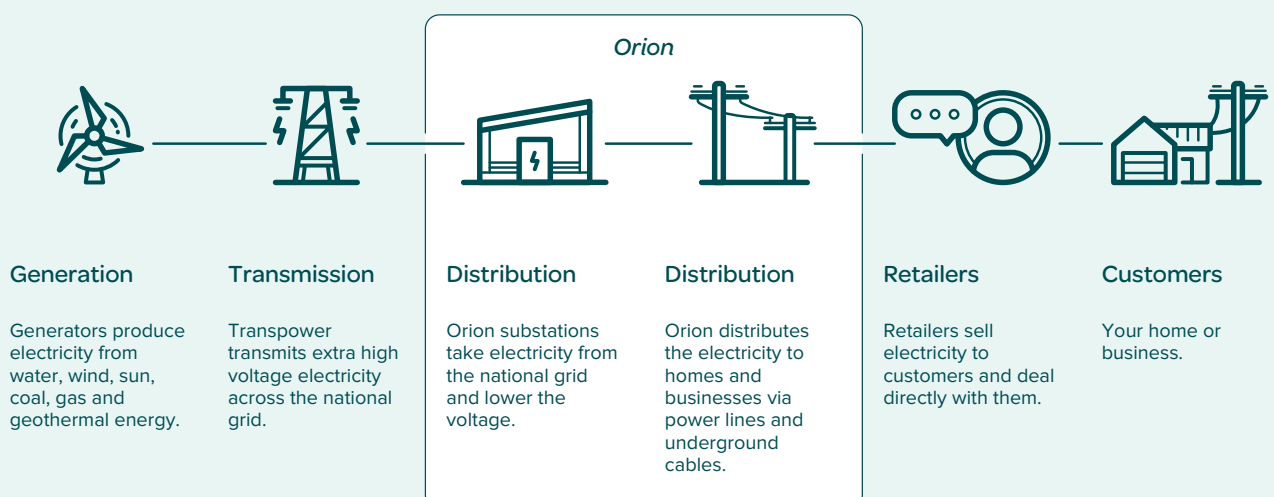
Where we fit in the electricity system

New Zealand's energy system comprises different types of businesses working together – including generators, Transpower (the national grid operator), distributors and retailers.

Orion is an electricity distributor. Our job is to distribute power from the national grid through our network to your homes and businesses.

We build, maintain and upgrade the substations, poles, power lines, underground cables and other equipment required to deliver power safely and reliably.

New Zealand's energy system



Our network

From the Rakaia to the Waimakariri, Banks Peninsula to Arthur's Pass, Orion owns and operates the electricity distribution network that provides power to Central Waitaha Canterbury.

Our purpose is to power a cleaner, brighter future with our community.

Our network extends over 8,000 square kilometres and delivers electricity to more than 228,000 homes, and businesses. It has two distinct regions:

- Region A includes the city of Ōtautahi Christchurch and its suburbs and represents around 6% of our physical network area and 83% of our customers.
- Region B includes the rural areas and regional towns in the Banks Peninsula and Selwyn District, around 94% of our network area and 17% of our customers.

We are community-owned and have two key shareholders – Christchurch City Council, through its subsidiary Christchurch City Holdings Ltd, and Selwyn District Council.

Our network areas



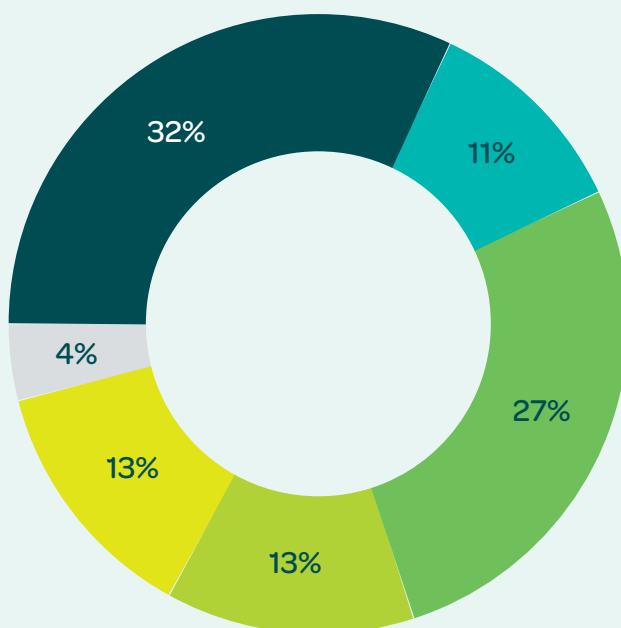
Cost of providing power

We recover the costs of providing our services through the lines charges included in your electricity bill, and through the fees we charge for new customer connections. We continuously invest in our network to support growth and to ensure safety, reliability and resilience.

You may not be familiar with our business name because your energy contract is with your chosen retailer. Your retailer bundles the cost of our line charges (as well as the costs of other businesses in the electricity system) into a single power bill.

Typically, our line charges represent around 27 cents of each dollar of your power bill. Transpower's costs represent around 11 cents, and the remaining 62 cents cover generation, retail, metering and GST charges.

What your power bill covers



32% Generation

This goes towards the cost of generating the electricity you use.

11% Transmission

This cost helps pay for building and maintaining the national grid.

27% Distribution

This cost helps pay for building and maintaining the power lines and cables that transport electricity from the national grid to your house.

13% Retail

This cost goes towards paying for the operating costs borne by the retailer you buy your electricity from.

13% GST

This is the Goods and Services Tax (15% of pre-tax amount, 13% of total amount).

4% General

This cost goes towards the cost of reading and maintaining your meter, energy efficiency programmes and the day-to-day running of the electricity market.

Why we're seeking a customised price-quality path

If we stay on the default price-quality path, we won't recover enough revenue to make the investments needed to avoid deteriorating network performance and higher costs in the future.

Like most electricity distributors in New Zealand, Orion is regulated by the Commerce Commission. It regulates 16 electricity distributors that operate as natural monopolies because having multiple providers for the same electricity infrastructure wouldn't be practical.

The Commission determines how much revenue we can earn over a set period from the lines charges our customers pay for our services. It also determines the minimum service quality we must deliver to customers. This is known as a price-quality path.

The Commission can set two types of price-quality path – a default path or a customised path (see definition on page 13 for more information). We are currently on the default path, and we have the option to apply for and propose our own customised path.

The default path Orion was on has been reset and the new default path became effective from 01 April 2025.

However, the maximum revenue we can earn on this default path is simply not enough to provide the safe, reliable and resilient network our customers expect.

We have done a rigorous, bottom-up assessment of the expenditure required to efficiently manage, maintain and operate our network to comply with our safety and quality standards. This assessment shows that our maximum revenue on the default path is materially below what we need to recover to support the required expenditure. If we stay on this path until the period ends in 2030, we will have to delay investments and activities that are needed now.

This delay would place our service quality at risk and this risk would increase over time. For example, you could expect to experience longer and more frequent unplanned power outages, and new customers could wait longer to be connected to the network.

A customised path would mean higher increases in our lines charges over the coming years than on the default path. We are conscious that this will make things more difficult for customers already facing cost of living pressures, but we are convinced that moving to a customised path from 01 April 2027 (financial year 2028) is in our customers' best long-term interests.

Electricity powers so many aspects of life that a reliable supply is critical for households, businesses and the local economy. As the economy decarbonises, it will become even more important in the future. In addition, we cannot delay the required investments forever. If we put them off for another five years, the costs involved will be significantly greater, leading to even higher price increases in the future. This delay is neither prudent nor efficient from a business perspective, and it would result in poorer outcomes for our customers and the Central Waitaha Canterbury region.

What's the difference between default and customised price-quality paths?

Both types of price-quality path constrain the amount of revenue we can recover from our customers and set minimum standards for the service quality we must deliver. This creates incentives for us to manage our network efficiently and discourages us from reducing service quality to increase profits.

The key difference between the two paths is how the total revenue amount is determined. For a default path, the Commission uses a simpler, standardised approach. This amount is calculated based on our past expenditure and to some extent the forward investment proposed in our asset management plan.

For a customised path, the approach is more detailed and business specific. We are required to submit a proposal to the Commission, which includes detailed information about the challenges and opportunities our business faces, and our investment and other spending plans over the period. This proposal is then subject to in-depth audit, verification, stakeholder consultation, and evaluation processes. The Commission will only approve proposed expenditure to be recovered through our lines charges if it is prudent and efficient and in the long-term interests of our customers.

Our expenditure profile

Over the last decade our capital investment has been shaped by the timing and nature of expenditure driven by the earthquake response and recovery, followed by rapid regional growth. After the earthquakes, significant investment was required to restore the network and connect new customers.

In 2013, a customised path enabled this necessary recovery-focused expenditure. However, to manage costs for customers, some long-term asset renewal activities were deferred during this period. Following this recovery period, our region experienced strong growth, and expenditure was directed toward network expansion rather than addressing these renewal works.

Upon returning to the default price path, our expenditure allowances did not reflect our deferred spending, effectively capping it at a level that is insufficient for us to meet the increased level of renewal and growth investment now required.

Challenges and opportunities

Our analysis and forecasts indicate it would be prudent and efficient to invest more to maintain network performance, enable growth, build resilience and prepare for the future.

In its final decision on the new default price-quality path, the Commerce Commission increased the maximum revenue local electricity distributors like Orion can earn from line charges over the 2025-2030 period. It did this so that distributors can increase their expenditure on maintaining reliability, meeting growing demand and addressing resilience needs.

While this additional revenue will contribute to addressing the key challenges and opportunities we face in the coming years, it is not sufficient for our specific business circumstances. Our own analysis and forecasts indicate that it is in our customers' long-term interests to invest more now to tackle key challenges and benefit from opportunities including:

Challenges:

- Asset renewals – Ramping up our asset renewal programme to ensure we can effectively manage safety risk across the network and maintain reliability.
- Growth – Increasing our network's capacity to support forecast population, demand and economic growth, which is very strong in parts of our region.
- Resilience – Strengthening the network's resilience to natural hazards, particularly earthquakes, to reduce the risk of major disruptions to the power supply during and after these events.

Opportunities:

- Meeting future needs – Preparing for new technologies that support changing customer needs and customer choice.
- Improving efficiency – Taking advantage of innovations and integrating new tools and systems to improve our efficiency.



Proactively managing essential infrastructure

Ageing assets are a key driver for our customised price-quality path. In 2022 we identified that poles along the 11kV line between Duvauchelle and Akaroa were nearing the end of their service life. We upgraded this 6.6 km stretch by refurbishing or replacing 115 poles with minimal impact to the community. This means Banks Peninsula residents can better rely on our service and reduces potential storm-related disruptions.

As in this example, the ageing profile of our portfolio of overhead assets means we need to scale pole renewals across the network to maintain reliability.



Ramping up asset renewals to manage network risk

As with all infrastructure, it is only practical to maintain electricity network assets for so long. As they age, and their condition deteriorates, the cost of maintenance and the risk of failure increases. Asset failure can lead to safety risk, as well as unplanned power outages. Having to replace assets after they fail is more disruptive for customers and more expensive than planned replacement.

For this reason, we aim to renew our ageing assets before this cost and risk gets too high. This proactive approach to renewals underpins the safety and reliability of our services.

Over the coming years, we need to renew a much larger number of assets than we have in past periods.

There are sound reasons for this:

- A large part of our network was built in the 1960s and 1970s. These assets are now nearing the end of their serviceable life and are soon due for renewal.
- After the 2010-2011 Canterbury earthquakes, we reduced routine renewals so we could focus on recovery projects in and around Christchurch where the damage was greatest. This helped us to restore power and repair the network in the Christchurch area sooner and keep costs down for customers at that time. However, this also led to a backlog of renewals in other areas that now needs to be addressed.
- We have recently developed more robust models and processes to understand the current and expected future performance of our assets and the overall health of our network. Our new approach provides more reliable guidance on the optimum age to renew assets to best manage the risk of failure and incur the lowest lifetime cost. We have identified a higher number of assets reaching this optimum age in the coming years than our previous approach had.

Failing to ramp up asset renewals will reduce network reliability, leading to longer and more frequent unplanned outages.



Increasing our ability to support growth

Central Waitaha Canterbury is a popular place to live and run a business, and some parts of the region are experiencing significant and sustained growth.

According to 2023 Census data, the population of Selwyn District grew by 29% in the five years to 2023, compared to average growth of 6.3% nationwide. Christchurch City's population also grew steadily, coupled with changes in planning rules that encourage housing intensification, such as replacing single houses with multi-unit developments.

This trend is forecast to continue, putting pressure on our network's capacity to connect new households and businesses and meet increasing levels of peak demand. Our analysis indicates that in the coming years:

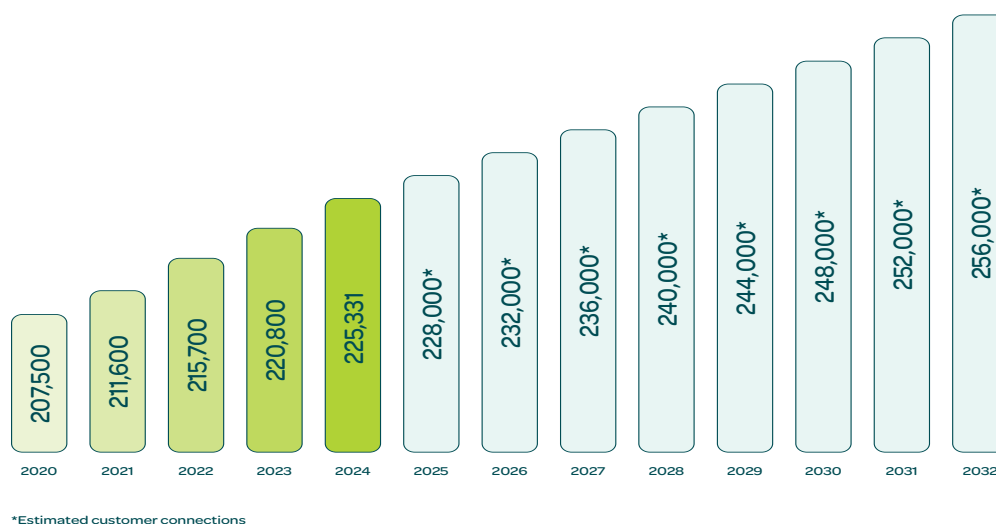
- There will be around 6,000 new connections each year. This equals more than 4,000 new customers, once disconnections and connection alterations are factored in.
- Maximum peak demand on the network will increase by 26%, up from the current maximum 675 megawatts to around 870 megawatts by FY34.

- A large part of peak demand growth will be from the residential sector, with some commercial and industrial growth.
- As energy systems decarbonise, electricity will be used as a fuel for more and more applications including electric transport, heating and cooking, etc. This means there will be significant demand growth for electricity on Orion's network.
- As our network expands to accommodate growth, additional investment will be required for ongoing maintenance.

Delaying investment would place our service quality at risk and this risk would increase over time, including more frequent and prolonged outages and delays in new customer connections. Capacity constraints could see access to the network rationalised, hindering regional growth and decarbonisation efforts in Central Waitaha Canterbury. This could limit opportunities for businesses and households to transition to low-carbon technologies, or disincentivise new businesses establishing.

Peak demand is like rush hour on the road, where power usage peaks for a short period. We need to make sure our network has the capacity to accommodate the growth in peak demand.

Net annual growth in connections, past and estimated



An aerial photograph of the Norwood GXP power station. The station is a large, rectangular industrial facility with multiple rows of electrical equipment, including transformers and switchgear, situated in a flat, open area. The surrounding landscape is a mix of green agricultural fields and some developed areas with buildings and trees. In the background, a range of mountains is visible under a clear sky. The title 'More power for our region' is overlaid in a large, white, serif font at the top of the image.

More power for our region

© Norwood
GXP

Over 2022 and 2023 we worked with Transpower to increase central Canterbury's power capacity. Our joint investment in a new grid exit point (GXP) and zone substation in Norwood, Selwyn is an asset that will serve customers well into the future. A GXP is a point where our network is connected to Transpower's transmission network. It will support growing electricity demand in one of New Zealand's fastest-growing districts and will be a cornerstone allowing population growth in Rolleston and Lincoln. This type of investment helps ensure the region can efficiently meet the power needs of existing and future customers.



Building network resilience to reduce major outage risk

Orion's network is critical infrastructure: our community depends on electricity and our services – especially during and after major earthquakes, storms and other natural events. However, the risk of damage to the network from these events is high.

Central Waitaha Canterbury is a high seismic risk area. The Alpine Fault also poses a significant threat, even though it's outside our network area. Scientific research indicates there is a 75% probability of an Alpine Fault earthquake occurring in the next 50 years, and a high chance that it will be a magnitude 8 event.

In addition, the risk of damage due to windstorms, floods and wildfire is increasing as climate change increases the frequency and severity of extreme weather events.

To manage these risks, we need to strengthen the network's resilience – so it is less likely to suffer major damage during these events and can be more quickly repaired after them, and you are less likely to face lengthy and widespread power outages.

But building resilience is a costly, ongoing activity. Therefore, we prioritise this work and implement it over time to manage the price impacts on customers. In the

coming years, we plan to complete the strengthening of a key set of assets – the 66kV cable sub-transmission network that is critical for powering the city of Christchurch and its suburbs.

During the 2011 earthquake, the network's older cables, circuit routes and construction design proved vulnerable, with some cables damaged beyond economic repair. We rebuilt the damaged section using improved modern lines and cables and more resilient circuit routes and construction design, making it stronger and enabling faster power restoration.

In the coming years, we plan to renew the remaining circuits in this network, so that all parts of Christchurch benefit from this greater resilience. This work is now a priority as continuing to operate and maintain these older cables, that are prone to failure and difficult to repair, presents a risk to power restoration.

New cables and circuits will boost resilience, enable faster power restoration after a significant earthquake, and improve fault management to keep more customers connected. Without strengthening the 66kV network, Christchurch risks prolonged outages for homes and businesses after a significant earthquake.



A journey of resilience

We know that a reliable and resilient network is essential. After the Canterbury earthquakes, our focus was on restoring the network and supporting the region's rebuild. Significant repairs were needed, and we strategically deferred some routine work to prioritise more immediate needs and keep prices down during recovery.

The repairs and upgrades completed post-earthquake have made parts of our network highly reliable and resilient. Rebuilt substations, lines, and cables are designed to withstand future challenges. However, areas where work was deferred now require renewal to ensure ongoing safety and reliability. Proactively getting onto these renewals now means we can continue to have a resilient network.



Preparing to meet future needs

Technology is advancing rapidly, and the needs and expectations of our customers and community are continually evolving. In the coming years, we need to make important investments to keep pace with these changes – so we are ready to meet emerging challenges.

For example, as New Zealand transitions to a low-carbon economy, the way our customers use the network is changing. While the uptake of electric vehicles, solar panels and battery storage is still relatively low, it will increase as purchase costs come down and pressures to meet emissions targets intensify. This means our network will not only deliver electricity to customers, but it will also have to take customer-generated energy back to the grid. We need to invest in preparing the network to manage these two-way energy flows.

Waiting to prepare the network for the mass uptake of electric vehicles, solar panels, and batteries would be inefficient. Managing two-way energy flows is complex but can benefit customers with lower costs and greater flexibility. A well-prepared network that enables cost effective and flexible solutions will support growth, enhance reliability, and potentially reduce the need for expensive new infrastructure through better utilisation of the network. It will take time for new technologies to reach critical scale and it won't immediately remove the need for continued maintenance, replacement and enhancement of the core network.

As technology evolves and our digital capabilities improve, the risk of cyber-attack increases. These attacks are becoming more frequent and sophisticated and could disrupt our systems, causing outages. Strengthening our cyber defences is essential to ensure reliability, to protect the network, and to safeguard customer data.



Innovating to improve our efficiency

The continued evolution of our digital capacity is needed to efficiently manage our network and enable customer choice in new technology.

We have opportunities to upgrade technologies, systems and tools to better monitor the network, manage assets, inform maintenance programmes, handle outages, and improve customer services. These upgrades will enhance our decisions, services, and increase efficiency over time.

Not keeping pace with new technologies and tools with proven benefits would reduce the network's efficiency and increase maintenance costs. It would also make managing and resolving outages harder and limit our ability to provide timely updates on outages and power usage. Over time, our customers would receive less value for money relative to those distribution businesses that take advantage of these tools.

A question to keep in mind

Do you understand the challenges and opportunities that Orion faces in continuing to provide the safe, reliable and resilient network that you rely on?

For more detail on our proposed investment approach, how it tackles these challenges and opportunities and its benefits for you, see page 26.

Drones get it done



We already use an automated drone to monitor our new substation in rural Selwyn. After successfully completing over 250 trial flights in 2023, we now conduct regular drone inspections of our Norwood site.

Investing more in this kind of technology will increase our efficiency and speed in locating network faults. Drones also enable inspections of assets in hazardous or inaccessible areas, making our team safer, allowing issues to be identified remotely, and helping us restore power quicker.

How we're engaging with customers and the community

We are committed to working closely with you, our customers, stakeholders and community, to ensure our investment plan reflects your needs and priorities.

To help shape our proposed investment plan, we initially consulted our community through our ongoing engagement channels. We are now keen to hear from a much wider group of customers and stakeholders. Your views will help us refine the plan and develop our customised path proposal for the Commerce Commission.

Post-COVID inflation has increased the cost of many goods and services, adding to cost-of-living pressures for many. We know that further increases in our lines charges will add to these pressures. Your feedback will help us to strike the right balance between investing to maintain the high quality of services you rely on into the future and the impact of these investments on the affordability of electricity in the coming years.

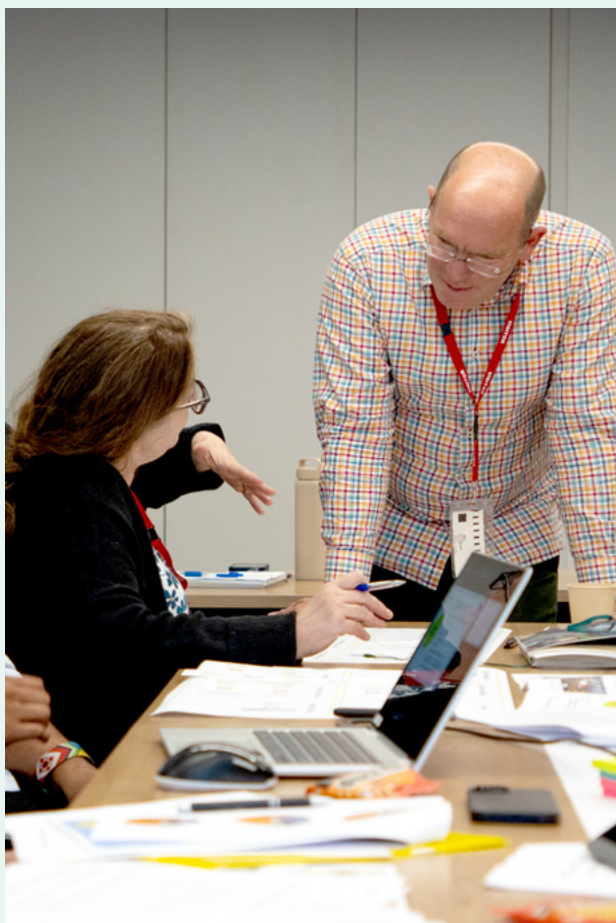
Our engagement to date

As part of our normal business, we engage with customers regularly through several channels. These include our:

- **Customer Advisory Panel**, which brings together community representatives to share insights on customer needs and provide feedback on our business plans, supported by an independent advisor for balanced perspectives.
- **Powerful Conversations workshops**, which we hold with urban and rural customers to explore key topics in depth and improve our understanding of customer perspectives.
- **Customer Perceptions Survey**, which is an annual survey of 800-1,000 residential and business customers that seeks their views about what matters most, and where we should focus our investment.
- **Communications channels**, including our Community Update newsletter, which reaches around 110,000 households, and our website.

We used these channels to share our early thinking on our plans for the coming years and to seek our customers' views. For example, at the October and November 2024 Customer Advisory Panel meetings, we discussed why we plan to apply for a customised path and listened to panel members' responses.

In our most recent Powerful Conversations workshops, we engaged with around 80 customers from urban, rural, and Banks Peninsula communities. We explained our investment drivers and sought participants' views on which areas were their top priority.



Engaging with our customers

We work hard to understand the needs and expectations of our customers. Being close to our customers helps us make informed asset management and investment decisions that benefit the people who rely on our network.

Orion's Customer Advisory Panel plays a vital role in this process. The Panel brings together community representatives, business leaders, and non-government organisations, providing a valuable forum to engage with a broad cross-section of our customers.

With a customer advocacy focus, the Panel offers valuable insights that help us align our plans with the expectations of those we serve.

What we've heard so far

Through this initial engagement, we heard that our customers' main priorities are maintaining the reliability of our network and building its resilience, but affordability is also important. In short, you want electricity that is available when you need it, at an affordable price.

For example, our Customer Advisory Panel told us that the safety, reliability and resilience of the network are vital both now and in the future. However, price increases are a key concern, especially for our community's more vulnerable members.

In our workshops, participants initially said that reliability and resilience were their top priorities. However, as we discussed asset management, including our renewals programme, and its role in our network operations, they developed a deeper understanding of how our key investment areas are interconnected. For example, they recognised that expanding and upgrading our network capacity to support growing demand is also important to maintain the reliability of supply.

In our 2024 annual perceptions survey, respondents indicated their top priorities were minimising power outages and restoring power quickly after disruptions. More than 80% were satisfied with the current level of reliability, and overall customer satisfaction with our services was high. Looking forward, respondents were keen to see the network ready for the future, us taking advantage of new technologies, improving efficiency and remaining reliable.

Next steps in our engagement

We will continue to engage with customers, stakeholders and our community over the next 12 months. As the next step, we want to hear your views on our proposed investments, their outcomes for customers and impact on bills, and whether we have the balance right.

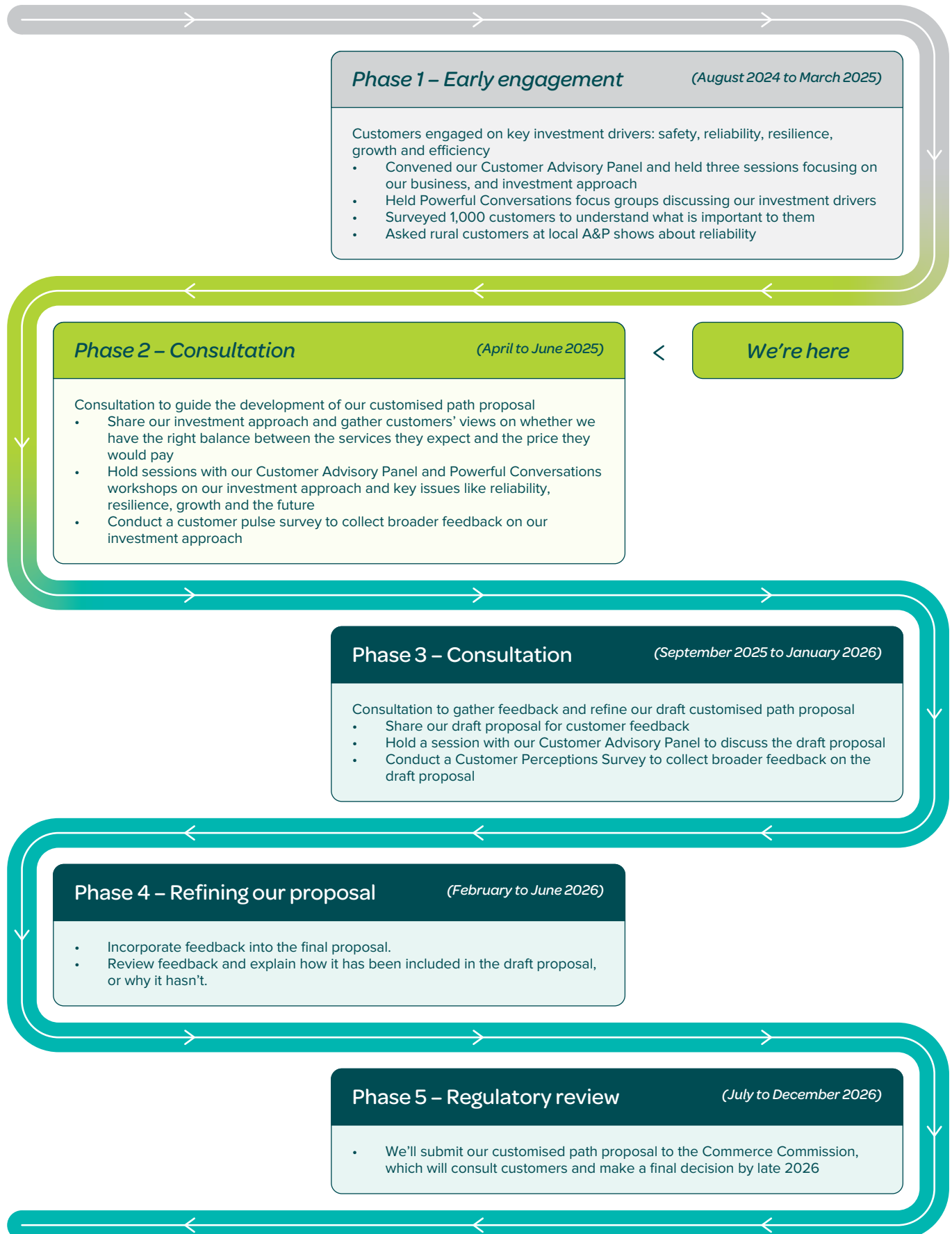
Your feedback will help us refine our investment approach and develop a draft customised path proposal that reflects our customers' values and priorities. We'll share this draft proposal and seek further feedback later this year.

We'll also continue to meet with our Customer Advisory Panel and host Powerful Conversations. This will enable us to test and deepen our understanding of your feedback and explore different options for responding to it in our customised path proposal.

Once we've considered all the feedback we receive on our draft proposal, we'll make our final decisions and prepare our final proposal to submit to the Commerce Commission in mid-2026.

Your feedback will help ensure our customised price-quality path proposal reflects what matters most to you. For information on how to have your say, see page 40.

Engagement pathway



Next steps in the regulatory process

To apply for a customised price path, we must submit a detailed proposal to the Commerce Commission. This proposal undergoes rigorous auditing, verification, and evaluation to ensure our investment plans are justified and align with customers' long-term interests.

A key part of this evaluation is independent verification. In 2025, an independent expert, approved by the Commerce Commission, will audit our data, analysis, assumptions, and investment plans to confirm they are reasonable. Their findings will guide the ongoing development of our proposal.

We will submit the final customised path proposal to the Commerce Commission in mid-2026. The Commission will thoroughly assess the proposal against regulatory rules and requirements and ask for feedback. The Commission will then determine our revenue allowance, and the customised price path will take effect on 01 April 2027 (FY28).

Questions to keep in mind

What is most important to you?

- ☐ Having a safe and reliable electricity network with fewer unplanned outages.
- ☐ Having enough spare capacity in the network to accommodate some growth in demand for electricity.
- ☐ Having an electricity network that is resilient to natural or unplanned disasters such as an earthquake or severe weather.
- ☐ Having an electricity network that can accommodate new technologies.
- ☐ The amount you pay for the lines charges component of your power bill.

How to have your say

The easiest way for you to let us know your views is via our Have Your Say consultation website at: haveyoursay.oriongroup.co.nz/cpp. You can also sign up there for email updates about this process.

If you'd prefer to send us an email, write to haveyoursay@oriongroup.co.nz, or you can send a letter to us at: The Orion Group, 565 Wairakei Road, Burnside, Christchurch 8053.

If you want to talk to someone about our investment approach, email haveyoursay@oriongroup.co.nz to make a time for you to share your feedback with us personally.

Please provide your feedback by 30 May 2025.

Our proposed investment approach

Our proposed approach represents our view of the investments and activities required to deliver a safe, reliable and resilient network that meets our customers' expectations and our community's needs, both now and in the future.

Our approach reflects the challenges and opportunities our business faces (see pages 14-19) and ensures we can meet our safety and quality standards, as well as other regulatory obligations.

We believe our proposed expenditure is consistent with the efficient costs that a prudent electricity distributor in our particular circumstances would incur.

In developing the approach, we considered two other options – one involving relatively less investment and the other relatively more (see pages 34-37). We chose the proposed approach because it best balances our customers' priorities, particularly maintaining the reliability of your electricity supply and the affordability of your power bills.



Overview of proposed expenditure

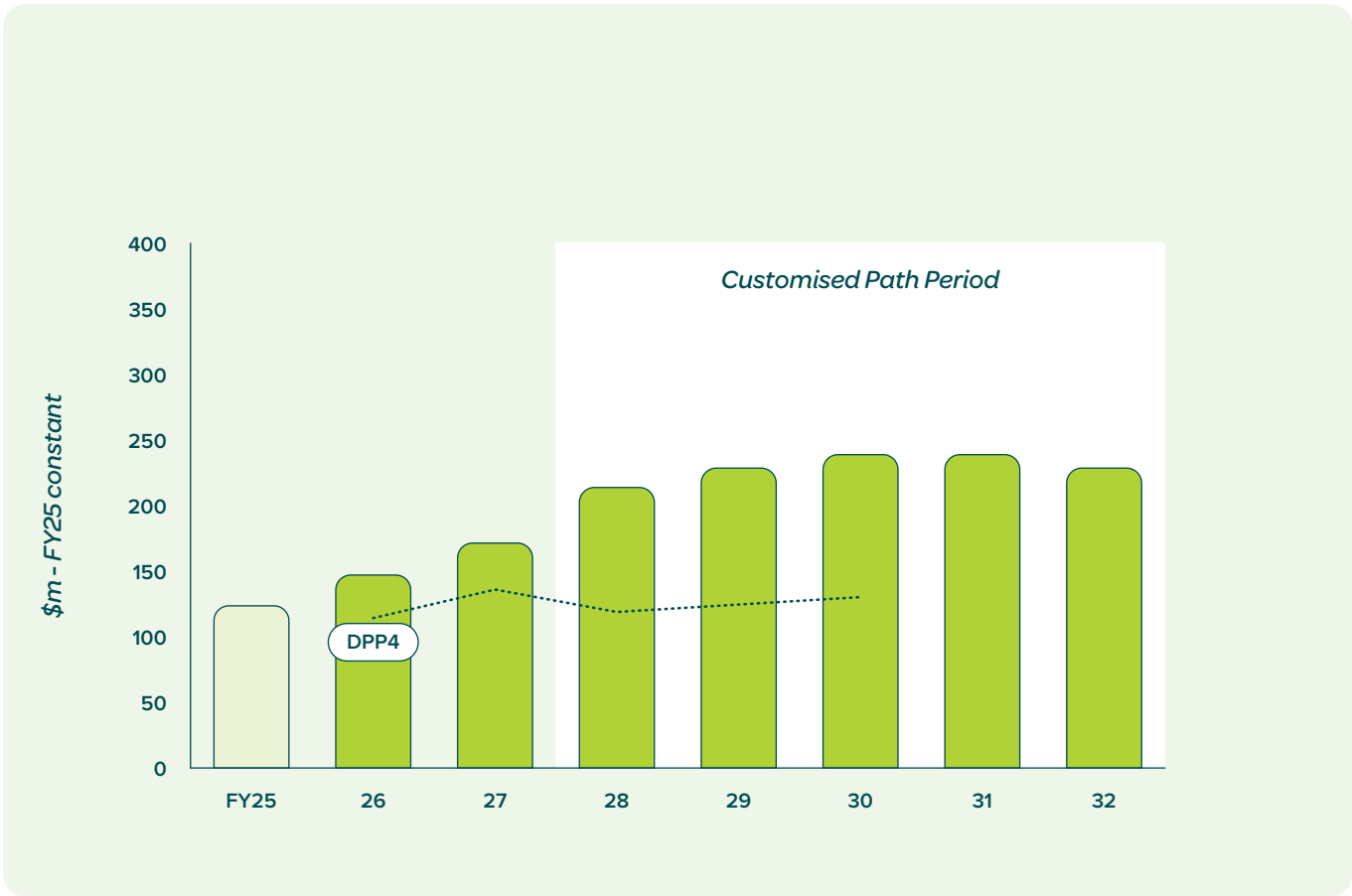
In total, we plan to spend approximately \$1.73 billion over the five years from 01 April 2027 to 31 March 2032.

This is our proposed customised price-quality path period, and we refer to it as financial years 2028 to 2032 (FY28-FY32). When we talk about this expenditure, it is in constant FY25 dollars, or today's dollars (i.e. it is not adjusted for forecast inflation). Using constant dollars is important for maintaining the accuracy and comparability of expenditure over time.

Most of the proposed spending is capital expenditure (67%), which is the long-term investments we plan to make in our physical assets. The rest is operating expenditure (33%), which is our day-to-day expenditure to run the network and support the delivery of our services.

Proposed capital expenditure

Our proposed capital expenditure (capex) for the customised path period is \$1.17 billion.



This graph illustrates how the proposed increase in capital expenditure from FY25 through to the 2028–2032 customised path period is in excess of the default path allowance. Disclosure Schedule 11a in Appendix B details the forecasted capex.

Proposed operating expenditure


Our proposed operating expenditure (opex) for the customised path period is \$568 million.





This graph illustrates how the proposed increase in operating expenditure from FY25 through to the 2028-2032 customised path period is in excess of the default path allowance. Disclosure Schedule 11b in Appendix B details the forecasted opex.


Proposed capex investment areas

Our proposed capex expenditure is focussed on four key areas:

- 

Renewing assets to effectively manage network risk and maintain reliability. Most of our proposed capex is to manage the risk that assets in poor condition will fail, resulting in safety risks and unplanned outages. These investments are fundamental to maintaining our safety and reliability standards and reducing the risk of more frequent and longer unplanned outages due to equipment failure.
- 

Strengthening the network to increase resilience. The majority of this proposed spend is to strengthen a key set of assets – the 66kV cable sub-transmission network in Christchurch. This investment is necessary to reduce the risk of major, prolonged outages due to a significant earthquake.
- 

Expanding and upgrading the network to support growth and prepare to meet future needs. Most of this proposed spend is to ensure we can connect new customers and meet increasing electricity demand. Some will also support industries to decarbonise and prepare the network for increasing uptake of electric vehicles, rooftop solar and other distributed energy.
- 

Renewing and upgrading non-network assets to support new technologies and improve efficiency. This proposed capex is for technologies and systems that will enable customer choice, improve the overall efficiency and effectiveness of our business operations, and support safety and compliance.

The need for increased investment in these key areas is driving most of the increase in our total proposed expenditure relative to recent years. Our proposed expenditure in each area is summarised below.

Key capex investments and the outcomes for customers

Proposed capex	What we'll invest in	Why we're investing	What this means for you
Renew network assets to effectively manage network risk and maintain reliability.			
\$720m - 740m	Overhead structures – increasing replacement or renewal of power poles and cross arms, and overhead conductors.	Assets are nearing the end of their serviceable life.	Reduced risk of unplanned outages due to asset failure.
	Overhead structures – painting steel structures.	Steel structures are ageing, painting extends their serviceable life.	Reliability levels maintained.
	Underground cables – replacement of the remaining 66kV oil-filled cables on our sub-transmission network. Increasing replacement of distribution and LV cables including streetlighting.	Following a significant earthquake, older oil-filled cables are prone to multiple faults leading to prolonged outages.	Safety levels maintained.
	Zone substations – increasing replacement or refurbishment of transformers and switchgear.	Extend the life of existing transformers and renewal of ageing switchgear.	Improved network resilience.
	Distribution switchgear – increasing replacement of switchgear.	Assets are nearing the end of their serviceable life.	
	Secondary systems – increasing replacement or renewal of protection systems.	Assets are nearing the end of their serviceable life, and the availability of spares is becoming limited.	

Proposed capex	What we'll invest in	Why we're investing	What this means for you
Expand and upgrade the network to support growth and prepare to meet future needs.			
Major projects \$85m - 105m	Four new 66kV underground circuits between zone substations – Belfast to Waimakariri, Marshland to McFaddens, Milton to Hoon Hay, and Lancaster to Milton.	Over time, population and demand growth will constrain the capacity of the network or trigger the need to enhance reliability.	A stronger network that can recover quicker after a disruptive event.
	New 66kV switchgear at Hoon Hay zone substation		New customers can readily connect to the network.
	Major reinforcement of the 11kV network at Hawthornden zone substation.		HV Security of Supply standard met.
	Two new 66kV overhead circuits connecting Norwood – Highfield – Rolleston, and Norwood – Greendale – Hororata – Darfield (Creyke).		Reduced risk of unplanned outages for existing customers from capacity constraints.
	Two new zone substations at Lincoln and Darfield (Creyke).		Network reinforced to support new technologies and enable customer choice.
	Upgrade zone substation at Rolleston.		
	Major reinforcement of our 11kV network in the Rolleston industrial area.		
Renew and upgrade non-network assets to support new technologies and improve efficiency.			
\$50m - 55m	Upgrading, replacing and introducing key digital tools and platforms that support network operations, asset management, and data collection.	Several systems supporting core business functions are currently outdated and require upgrade or replacement. In some cases, new solutions will provide automation and functionalities that existing systems lack.	Delivery of improved services with more efficient investment. Enhanced ability to respond to events on the network.
	Increasing the scope and amount of data we collect and applying it to our decision-making and operations automation.	A more detailed view of our network coupled with advanced analytics will identify, and in time predict, emerging asset issues, constraints and congestion.	Delivery of improved services with more efficient investment. Enhanced ability to respond to events on the network.
	Strengthening our cyber security capabilities.	Boost protection against the increasing frequency and sophistication of cyber-attacks.	Reduced risk of unplanned outages due to cyber-attacks. Greater protection of customer data.
	Systems and platforms that support new technologies, including managing two-way electricity flows, and automation of real time operation of the electricity network.	Continued improvement of digital capability is needed to facilitate customer choice.	Network has the capacity to support new technologies. Supports cost effective and flexible solutions to meeting future growth.

Increasing resilience and supporting growth

© 66kV Bromley to Milton cable

One of our key priorities is strengthening our network to ensure it stays safe, reliable and resilient. We're doing this to ensure we're better prepared for something like the magnitude 8 earthquake on the Alpine Fault that's predicted to occur in the next 50 years.

An essential part of this involves replacing ageing oil-filled underground power cables that are critical in powering Christchurch City. In 2023 we completed part of this work between Bromley and Milton, and we're now working from Milton to Halswell. The new cable uses the latest technology and is sized to accommodate future growth.

Proposed opex investment areas

Our proposed opex is in the following areas:

- **Maintaining our network assets to keep them in optimal working condition.** This includes proactive maintenance, such as routine inspection and repairs, and reactive maintenance, including repair of faults and emergency repairs.
- **Managing vegetation around our assets.** This involves trimming trees and other vegetation around our assets to reduce safety hazards and outages.
- **Supporting our network and business operations.** This includes opex on activities related to managing the network and running our business, such as digital systems, our control centre, customer services, and corporate services.

Our proposed expenditure in each area is summarised below.

Key opex activities and the outcomes for customers

Proposed opex	What we'll invest in	Why	What this means for customers
Maintaining our network assets to keep them in optimal working condition.			
\$100m - 120m	Increasing and improving our maintenance, inspection, condition assessment, servicing and testing activities.	A comprehensive understanding of network conditions enables efficient asset management and informed decision-making.	Continued safety and integrity of assets. Reduced risk of unplanned outages due to asset failure. Reliability levels maintained. Safety levels maintained.
Managing vegetation around network assets.			
\$40m– 45m	Expanding our vegetation management programme in line with the requirements of the updated Tree Regulations.	Without regular monitoring and management, vegetation can impact the overhead network leading to unplanned outages, damage, injuries and fire.	Reduced risk of unplanned outages due to vegetation. Reliability levels maintained. Safety levels maintained.
Supporting our network and business operations.			
\$60m– 70m	Licensing and support costs for key digital tools and platforms.	Digital tools and platforms support most of our business processes. Licensing and support agreements ensure that the currency, performance, availability, and security of our systems align with the operational requirements of the business.	The maintenance of applications and digital platform systems is crucial for their optimal performance and support of business operations.

Questions to keep in mind

- To ensure a safe, reliable and resilient network, Orion has developed a proposed investment approach to address current challenges and future opportunities. Do you support this proposed approach?
- Do you believe Orion's proposed investment approach achieves the right balance between maintaining network reliability, reducing risk, and affordability?

Alternative investment approaches we considered

Our proposed investment approach strikes a careful trade-off between risk, reliability, resilience, and affordability. To arrive at this, we explored three options for investing – a balanced approach, as well as a more limited approach and an accelerated approach.

Over the page, we compare the balanced approach with the limited and accelerated options, which we did not select. While all investment approaches are prudent and efficient, they each involve different trade-offs between price and quality.

Investment approaches

	Alternative 1 Limited investment	Proposed option Balanced investment	Alternative 2 Accelerated investment
Summary	Under a limited approach, we would reduce investment to minimise price rises. Asset renewals and upgrades would continue at the current pace, causing a growing backlog of maintenance and a higher risk of asset failures. Over time, this would reduce safety, network reliability, resilience, capacity, and efficiency.	Under this balanced approach, we would increase investment to keep the network safe, reliable and resilient. This would involve more asset renewals and upgrades, and improving resilience, capacity, and efficiency while maintaining current safety and reliability standards.	Under the accelerated approach, we would increase investment to create a highly reliable and resilient network by speeding up asset renewals, maintenance, and future demand planning. We would also prepare the network for new technologies with advanced digital tools and platforms.
Risk	Under a limited approach we take on a higher level of risk.	Under this approach we balance risk, reliability and affordability.	Under an accelerated approach we benefit from a lower level of risk.
Investment priorities	<ul style="list-style-type: none"> Reactive renewal of ageing equipment A maintenance backlog develops Limited investment in network capacity No additional investment in network resilience Limited investment in digital tools and platforms 	<ul style="list-style-type: none"> Renew ageing assets efficiently based on calculated assessment Critical equipment is maintained at current levels Network capacity is managed efficiently Additional investment in network resilience Additional investment in digital tools and platforms 	<ul style="list-style-type: none"> Renew equipment before it causes issues All equipment is maintained more frequently Network capacity is enhanced Accelerated investment in network resilience Accelerated investment in digital tools and platforms
Customer outcomes	<ul style="list-style-type: none"> Lower short-term price rises Higher risk of unplanned outages due to asset failure Safety, reliability and resilience decrease over time Network capacity cannot support growth Inability to leverage new technologies Compromised ability to support decarbonisation Risk of higher long-term costs due to deferred maintenance 	<ul style="list-style-type: none"> Short-term price rises Reduced risk of unplanned outages due to asset failure Safety and reliability maintained Network capacity can support managed growth Improved network resilience Ability to support managed decarbonisation Future smaller price rises may occur 	<ul style="list-style-type: none"> Higher short-term price rises Lower risk of unplanned outages, even after disruptive events Improved reliability and resilience Accelerated network expansion to prepare for any growth Early adoption of new tools and technologies Network fully supports decarbonisation Future price rises are likely to be low
% of required spend	Limited investment allows us to deliver 74% of the forecasted investment required.	Balanced investment allows us to deliver 100% of the forecasted investment required.	Accelerated investment allows us to deliver 117% of the forecasted investment required.
Total spend over 5-year customised price-quality path period	\$1.28 billion	\$1.73 billion	\$2.02 billion
Average residential line charge increase per month above the default path increase.	\$2.00 (+/- \$1.50)	\$8.00 (+/- \$1.00)	\$13.50 (+/- \$2.50)

Why the balanced approach is our proposed option

As detailed in Section 4, our regular customer surveys and early engagement on this investment approach have shown that our customers want us to prioritise reliability and resilience, support growth, and keep prices down, and this has informed our decision making.

Alternative 1: The limited approach

This reactive approach to asset management would lead to declining network performance, increased outages, slower repairs, and limited capacity for growth or technological improvements.

Customers have made it clear they want us to maintain current levels of reliability and resilience, so this option is not the right way forward. Although it would result in lower short-term price increases, this approach falls short of delivering the level of service our customers expect. Under this approach, price rises in the medium to long term are likely to be higher.

Alternative 2: The accelerated approach

An investment option focused on renewing assets and acquiring new technologies to create a highly resilient, cost-effective network, minimising supply risks even during major disasters like a magnitude 8 Alpine Fault earthquake.

While this approach would accommodate regional growth, customer feedback shows that over-preparing or aiming to be ahead of the market is undesirable if it means significant price increases. With technology

changing so fast, there is also a risk of investing in solutions that quickly become outdated or incompatible with future advancements. Under this approach, short-term price rises would be high. As such, this approach was not pursued, as it does not align with our customers' affordability priorities.

Our proposed option: The balanced approach

Our recommended investment option strikes a careful balance between cost-effective spending and network performance.

It would enable us to renew and maintain equipment, address key risks to network resilience, and support regional growth and the adoption of new technologies to enable customer choice and improve efficiency. This approach ensures safety, reliability, and resilience while aligning with customer and network needs in a prudent and efficient way.

We're confident we can efficiently deliver the investment in this approach. Reducing the level of investment, as in the limited approach, could result in inefficient outcomes. For instance, reactive maintenance is more costly than proactive maintenance. Additionally, adjusting the workforce in response to reduced investment would also be inefficient. This is because it could necessitate remobilisation when future investment is required to address safety and reliability issues associated with a declining network.

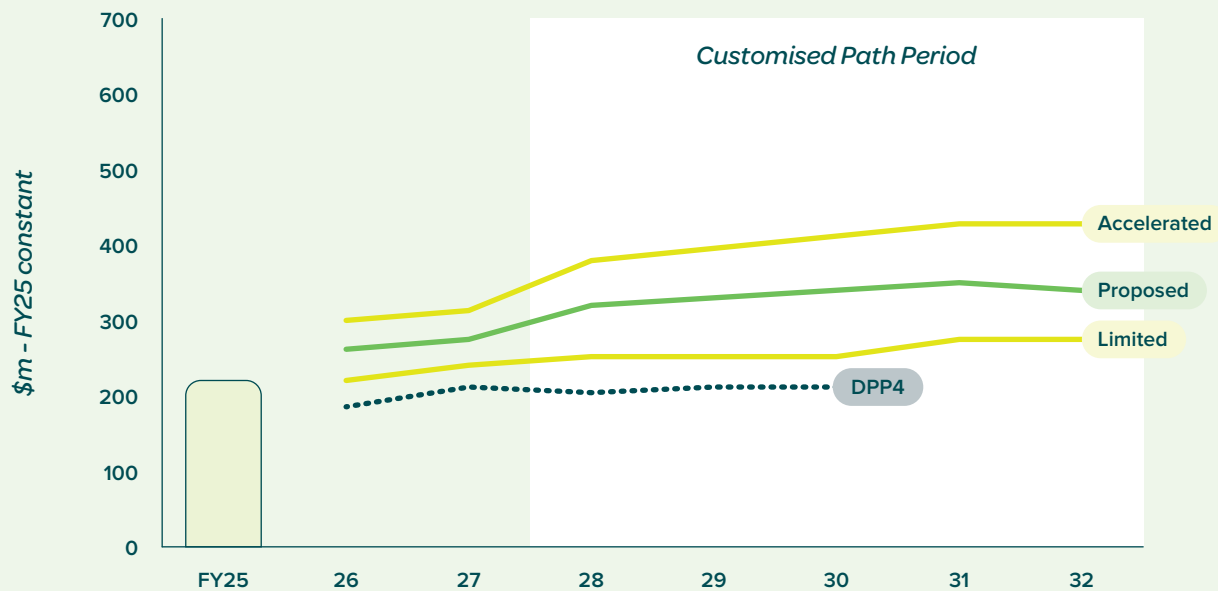
Questions to keep in mind

- Are there aspects of the alternative investment options that you would like Orion to consider further?
- What is the one thing you believe Orion needs to focus on?

How the approaches compare

The graph below compares the revenue from the three investment approaches to the default price-quality path, based on the default path reset effective 01 April 2025.

How the investment approaches compare



In summary, our proposed investment approach involves:

- Balancing increased investment to maintain a safe, reliable, and resilient network while keeping costs within reasonable limits
- Increasing the renewal of ageing assets and maintaining critical equipment
- Efficiently managing network capacity to support predicted growth
- Investing prudently in systems and tools to enable customer choice and improve efficiency

How our proposed approach would impact your bill

We know cost is at the top of everyone's minds in these challenging times, but we've also seen the consequences of underinvestment in infrastructure.

The proposed forecast is estimated to cost \$1.73 billion.

Being on a customised path from FY28 would see an estimated increase in distribution lines charges on the average residential power bill of between \$7.00 and \$9.00 per month for each year of the customised price path. This is in addition to the recent Commerce Commission default path decision for Orion which resulted in an increase in distribution lines charges of around \$16 per month on the average residential power bill from 01 April 2025.

The customised price-quality path we're proposing will ensure we balance maintaining a safe, reliable and resilient network with investing for tomorrow.



Tell us what you think

Your input is essential to help us shape a customised path proposal that meets your needs.

We want to ensure you have a say in:

- How our plans might affect the lines charge on your power bill.
- The benefits and trade-offs involved in our proposed investment approach.

The Commerce Commission will also be interested in understanding your perspectives.

How to have your say

The easiest way for you to let us know your views is via our Have Your Say consultation website at: haveyoursay.oriongroup.co.nz/cpp. You can also sign up there for email updates about this process.

If you'd prefer to send us an email, write to haveyoursay@oriongroup.co.nz, or you can send a letter to us at: The Orion Group, 565 Wairakei Road, Burnside, Christchurch 8053.

If you want to talk to someone about our investment approach, email haveyoursay@oriongroup.co.nz to make a time to share your feedback with us personally.

Please provide your feedback by 30 May 2025.



Our questions for you

To help us understand your needs and priorities, we have included questions throughout this document that we welcome your feedback on. You can answer some or all of these questions and provide any other feedback you wish to share.

Section 3 – Challenges and opportunities

- Do you understand the challenges and opportunities that Orion faces in continuing to provide the safe, reliable and resilient network that you rely on?

Section 4 – How we're engaging with customers

- What is important to you?
- Having a safe and reliable electricity network with fewer unplanned outages.
- Having enough spare capacity in the network to accommodate some growth in demand for electricity.
- Having an electricity network that is resilient to natural or other disasters such as an earthquake or severe weather.
- Having an electricity network that can accommodate new technologies.
- The amount you pay for the lines charges component of your power bill.

Section 5 – Our proposed investment plan

- To ensure a safe, reliable and resilient network, Orion has developed a proposed investment plan to address current challenges and future opportunities. Do you support this proposed plan?
- Do you believe Orion's proposed investment plan achieves the right balance between maintaining network reliability, reducing risk, and ensuring affordability?

Section 6 – Alternative investment options we considered

- Are there aspects of the alternative investment options that you would like Orion to consider further?
- What is the one thing you believe Orion needs to focus on?

Please let us know what you think by completing our online questionnaire at: haveyoursay.oriongroup.co.nz/cpp.

Our updated 10-year asset management plan

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Liability Disclaimer

This Asset Management Plan (AMP) has been prepared and publicly disclosed in accordance with the Electricity Distribution Information Disclosure Determination 2012.

Some of the information and statements contained in this AMP are comprised of, or are based on, assumptions, estimates, forecasts, predictions and projections made by Orion New Zealand Limited (Orion). In addition, some of the information and statements are based on actions that Orion currently intends to take in the future. Circumstances will change, assumptions and estimates may prove to be wrong, events may not occur as forecasted, predicted or projected, and Orion may at a later date decide to take different actions to those it currently intends to take.

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When considering the content of this AMP, persons should take appropriate expert advice in relation to their own circumstances and must rely solely on their own judgement and expert advice obtained.

Introduction

This section of our 2025 Asset Management Plan Update (AMP Update) provides a refresh of our planning outputs for the next decade. It details key changes in our thinking and planning since our 2024 Asset Management Plan (AMP 2024) was published in March 2024.

AMP 2024 reflected our views on network need and our customers' future energy needs, informed by our strategies, business objectives, practices and projects. AMP 2024 remains the reference point for information on our asset management system, strategies, objectives, practices and processes.

Since disclosing AMP 2024 our forecasting for the next ten years has evolved. In this AMP Update, we describe the material changes to the overlapping period (nine years) between the respective AMP 2024 and AMP 2025 periods for asset management practices, and expenditure in the key expenditure categories of network development, asset lifecycle management and non-network operational expenditure as well specific commentary on information disclosure requirements related to quality, connection and innovation. Detailed schedules of expenditure, asset condition, forecast capacity and demand, and forecast interruptions and duration (quality) are provided in the Appendices to this AMP Update.

Regulatory requirements

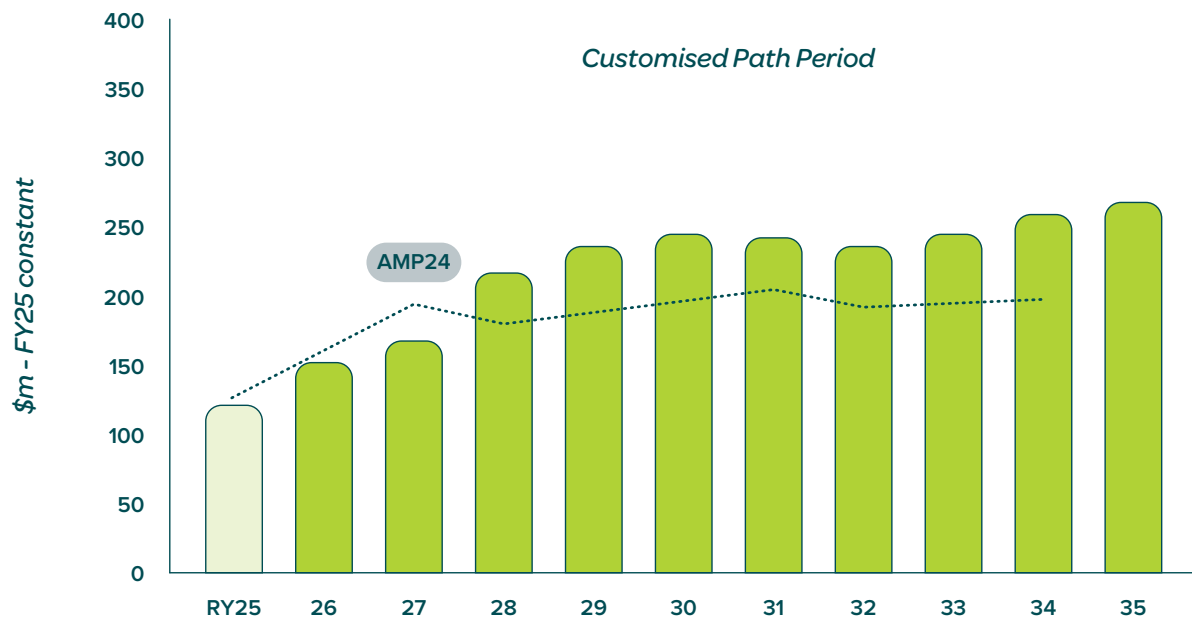
Providing this update on our forecasted expenditure meets the Commerce Commission's Information Disclosure requirements, which require us to disclose our asset management plan annually either by way of a full plan or as an update in years where this is allowed. This year we are able to issue an update, and we have chosen to do that.

Total capital (capex) and operational (opex) expenditure

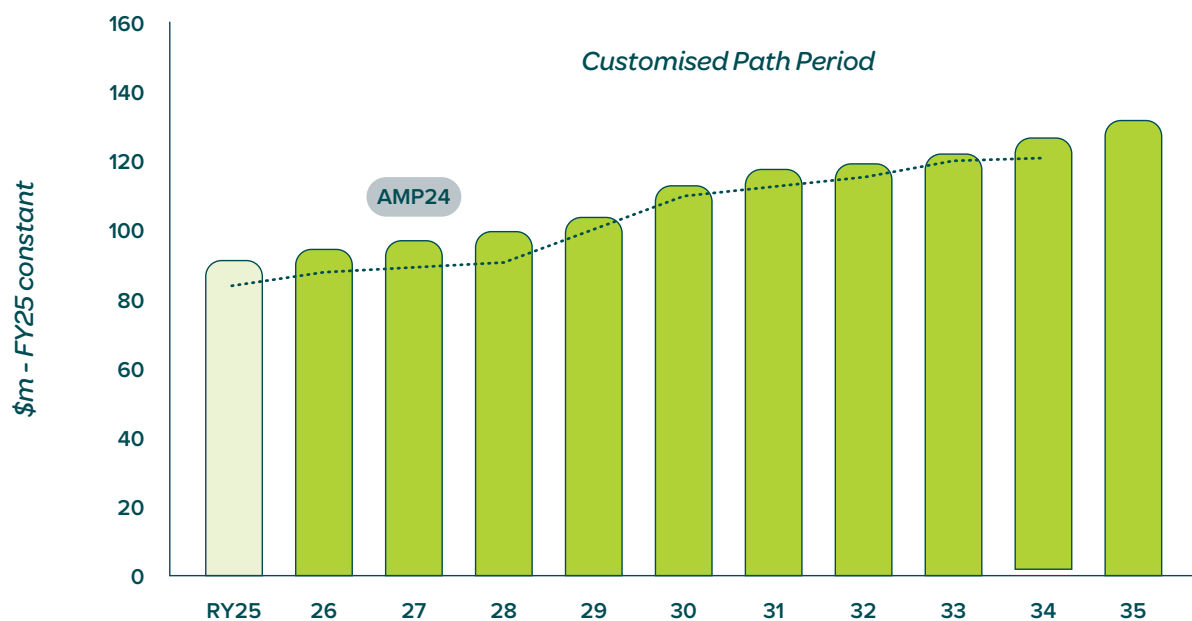
There is a material change in total capital and operational expenditure across the 10 years of the AMP Update as compared to AMP 2024. The material change centres around our Capex forecast with our Opex forecast remaining broadly similar to AMP24

We are preparing a customised price-quality path (CPP) application for the material change that occurs in the five years FY28-FY32 and we refer you back to Part 1 of this AMP Update for details on this proposed investment plan.

Annual Capex Forecast AMP 2025 compared to AMP 2024



Annual Opex Forecast AMP 2025 compared to AMP 2024



Managing our assets

Asset management practices

Our asset management practices continue to evolve with a strong focus on powering a cleaner and brighter future with our community. Below we summarise some of the main areas of focus, with further details in the remainder of this AMP Update.

- Processes and systems
- Organisational accountabilities
- Risk management framework
- Operational response
- Flexibility and innovation

Processes and systems

In 2024, we launched a programme of work known as integrated asset management or IAM. This connects all the different people and technologies involved in our asset management process. Our current systems and processes are non-integrated involving a number of platforms including those reaching end of life, and are not well placed to support modern processes and evolving information disclosure requirements. We have selected Maximo (MAS) for our asset management platform and Esri (ArcGIS) for our geographic information system which provides location information about our assets.

The key asset management processes involved are:

- Maintenance
- Emergency work
- Customer initiated work
- Capital work

- Procure-to-pay
- Vegetation management

This will provide simple, automated tools that create better visibility of our assets and work pipeline in order to extend operational performance of the business. Instituting this new programme will also allow us to retire a number of legacy and end of life systems.

Organisational accountabilities

How our organisation is structured affects how our customers experience our service and deliverability. Alignment of our organisational structure with the new processes and asset management systems we are implementing will ensure we achieve better outcomes for customers and improve operational excellence.

We have made material changes in two areas of our organisational structure. Firstly, we have increased resourcing in our connections team with a new customer solutions team. This team will better support customers with technical and commercial decision making for more complex connection or upgrade requirements. This includes technical integration of these connections to our existing infrastructure and their impacts on network development, and customer assistance with progression through the process to application approval. Secondly, we have reviewed our business model and capability requirements for procurement and delivery of our AMP work programme. Bringing them closer together to improve project management and procurement to ensure our service delivery partners get the right work at the right time, and work gets done cost effectively.

Risk management framework

During 2024, we reviewed our risk management framework and refreshed our guidelines for risk escalation. Taking account of our changes in processes, systems and organisational accountabilities, we have developed a new risk framework. This expands our approach away from a single view of risk to a set of risk appetite statements.

This means rather than applying a conservative risk appetite to all types of activities at Orion we will move to a more nuanced approach to assessment of existing and emerging risks. Moving forward this will support our asset management strategy and asset management practices through detailed risk assessments including on network infrastructure by types of equipment.

Operational response

During 2024, we completed a rollout of Coordinated Incident Management System training. We are now better prepared as we move into 2025 to address emergency events in a more structured and efficient way. This training supports our workers in responding to critical incidents involving multiple agencies. The training:

- Strengthens our understanding of roles and responsibilities during critical incidents,
- Increases our preparedness to respond, and
- Ensures coordination and a common language and techniques between responding agencies.

The training has already been used in responding to the 2024 Port Hills fires, civil defence exercise Pandora and an asset safety event.

Flexibility and innovation

Orion relies on hot water flexibility as a key tool to manage our network, reducing network wide peaks by approximately 20%, and avoiding \$19.5m in additional network investment annually. This capability has been enabled through ongoing enhancements to our load management systems.

Modern smart meters are increasingly being deployed across the Orion network. These meters are equipped with technology that enables other parties, including retailers, to also control hot water, which creates the opportunity for new offerings to be developed for their customers. We estimate that by this coming winter, retailers could be managing 40-50MW of hot water load on our network – a significant portion of our peak demand that illustrates the scale and importance of coordinating flexibility.

We believe customers should be able to maximise the value of their flexible resources, including hot water, and have choice over how their resources are managed. In support of this vision, we've been collaborating with retailers to enable approximately 8,500 households to participate in shared hot water flexibility trials across our network. These trials have focussed on testing how this technology functions, quantifying the potential value available to customers, and developing coordinated

operational approaches that ensure we maintain network security – while enabling customer choice.

Recognising that industry-wide consistency benefits all stakeholders, we've played a significant role in the development of a common Load Management Protocol, as part of an Electricity Networks Aotearoa (ENA) project team. This groundbreaking, collaborative approach establishes the foundation for integrating flexible resources across the electricity system in a coordinated way that maximises consumer value.

For more information about flexibility and innovation at Orion visit our innovation page of our website, www.oriongroup.co.nz/assets/Your-energy-future/Orion-Innovation-Strategy-FY25-update.pdf.

Our use of new technology needs to evolve to enable the full potential of demand side participation. Alongside projects such as Lincoln Flex, we are building the platforms to enable demand side participation through targeted initiatives such as,

- Enhancement of existing systems such as supervisory control and data acquisition (SCADA), and our control distribution management (PowerOn) platforms to improve system control, automation and coordination. Enhancement of these systems will enable us to coordinate more devices and manage increasing complexity ensuring security of supply and optimisation of the system through demand management which can help keep costs down and safety up in the long term.
- SCADA is a control system architecture that allows an electricity distributor to remotely supervise and control equipment out in the network. An example is remotely providing information about the status of voltages and remote device open/close.
- PowerOn enables automated distribution management such as automatic power restoration following unplanned events and outages that gets power back on more quickly for customers.
- Next steps include:
 - Development of a live low voltage operating model for use by network controllers for management of areas of the network with increased distributed energy resources uptake (two-way flows of electricity), and improve operational safety for our service providers working on the network.
 - Active network management (DERMs) for enhanced visibility and control of distributed energy resources to enable real-time and forecast powerflows. This means we can manage load across the network and understand the state of load at any time.
 - Switching advisor which optimises isolation plans for planned work to ensure as many customers as possible retain supply while work proceeds.
 - Using smart meter data to overlay in the above systems, inform and improve efficiency of our asset management and operational decisions.

Asset Lifecycle Management

Our approach to lifecycle management of our electricity network assets seeks to ensure we deliver a safe, secure, and reliable electricity service to the communities of central Canterbury, today and in the future.

As part of our 'business-as-usual' asset lifecycle management processes we have developed updated investment plans for the 10-year AMP period. These plans reflect updated asset information and changes to our forecasting approaches that reflect our ongoing improvements to our asset management practices.

Asset lifecycle management capex

Orion continues to progressively improve its approach to managing its existing electricity network assets throughout their lifecycle. Over time and as these assets age their condition and performance deteriorates, increasing the risk of asset failure. As we improve our condition monitoring, asset information, and analytical capability, we have identified a growing need to address this risk.

To deliver a safe, secure, and reliable service into the future requires that we proactively invest in managing our assets over their full lifecycle. A key driver of this is the need to mitigate failure risks posed by ageing or poor-condition assets on our network. From a renewals capital expenditure perspective, this typically involves refurbishment of poor condition assets or proactive replacement of assets before end-of-life failure.

To effectively manage risk on our network, we ensure our investment plans prioritise those assets that pose the greatest risk. This is driven by strong needs identification, underpinned by good practice analysis using robust asset information. To ensure this, we have made a number of improvements to our asset lifecycle forecasting approaches, including:

- Updated and refined asset management intervention strategies
- Improved analytical techniques and modelling including adoption of replacement expenditure models (Repex) and survivorship modelling
- Refreshed and expanded the asset information used to support our analysis
- Refined our costing methodology by introducing new cost building blocks, which better account for total install costs
- Refreshed our individual unit rates, including improved definition of their scope
- Used external specialists to review and test our modelling.

Leveraging the above improvements, the detailed planning and analysis we have undertaken to support our 2025 AMP investment plans shows a need to lift investment in some of our asset classes.

Forecast asset lifecycle capex

During the AMP period we propose to invest approximately \$1.4 billion on asset lifecycle management Capex. This reflects an uplift compared with our 2024 AMP forecasts. Key drivers for this include the following:

- Renewals Capex accounts for the majority of asset lifecycle management Capex. We will increase renewals by ramping up investment over the planning period to address needs across our main asset classes including increased proactive renewal of crossarms and an expanded program to manage our steel towers.
- Reliability, Safety and Environment (RSE): has decreased compared with our 2024 AMP. This is primarily due to a recategorisation of projects to better reflect main expenditure drivers
- Asset relocations Capex includes the portion of the cost that Orion covers to relocate assets following third-party requests, which vary over time and are somewhat beyond Orion's direct control. Our forecast for the AMP period is down on our 2024 AMP forecast.

Network opex

We have included network Opex within our overall asset lifecycle management category. The related network Opex forecast includes our field maintenance activities and expenditure related to vegetation management. This is consistent with information disclosure categories.

Since our 2024 AMP, we have improved our approach to forecasting network Opex. We have adopted a 'base-step-trend' approach to forecast recurring expenditure including preventive and corrective maintenance, and vegetation management. This approach is broadly consistent with the default path methodology and aligned with those used by many utilities and economic regulators.

During the 2025 AMP period we propose to spend approximately \$443m on network Opex. This reflects a reduction compared with our 2024 AMP forecasts. Key drivers for this include the following:

- Maintenance (Routine & Corrective Inspection and Asset Replacement & Renewal): our overall forecast for the AMP period is below our 2024 AMP forecast.

We expect to leverage our system and process improvements, including from the implementation of a new integrated asset management system, and refine our inspections and condition monitoring regimes. This will support improved analytics supporting our wider asset management approach. We expect to identify and address an increased number of defects through these improvements.

- Service Interruptions and Emergencies (SIE): our overall forecast for the AMP period is broadly similar to our 2024 AMP forecast. While we expect to see an uplift in cost pressures due to increased weather events (including higher windspeeds and more frequent storms), we expect this to be partially offset by our increased renewal expenditure and the resulting improvement in overall asset condition.
- Vegetation management: our overall forecast for the AMP period is below our 2024 AMP forecast. We plan to implement improved analysis using more sophisticated inspections (potentially through the use of LiDAR and satellite imagery) to further improve our identification and prioritisation of vegetation work. This includes ensuring we are in full compliance with the updated Tree Regulations.

Planning our network

Network development

The network development projects outlined below are broadly consistent with those in the 2024 Plan. However, changes to major and minor projects based on revised planning inputs, such as customer-driven work, have driven updates to our expenditure forecasts. These updates reflect adjustments in the timing and scope of the required investments.

Since the 2024 Plan, we have also enhanced our:

- Costing methodology by introducing cost building blocks, which better account for uncertainties in semi-detailed projects planned further out in the horizon.
- Understanding of existing constraints in the 11kV and LV network.
- Clarity around potential future challenges driven by technology-induced demand.

As a result, we have increased our investment to address these issues while enabling electrification and maintaining reliability.

Along with these updates, we have added a new project to support the Ryans Road industrial development. This is part of the Government Fast Track project list.

We also note that several projects are excluded from this AMP Update, due to the level of uncertainty surrounding their timing or scope, and the table describing Potential Reopener projects in the following section provides further information on these projects. These will continue to be monitored and reassessed as new information becomes available and may become candidates for regulatory reopeners.

Uncertainty and prudence

In this section we discuss our approach to managing uncertainty and prudence within the economic regulation framework and in the long term interests of consumers. Specifically;

- Deferral during DPP3 was necessary given a tight economic environment including high inflation not envisaged during the setting of DPP3 allowances
- The need to consider reprioritisation of investment as we move from DPP3 into DPP4 and in the context of our intention to apply for a CPP which will begin part way through DPP4
- The use of, or consideration of reopeners during the early years of DPP4.

Deferral during DPP3

Given the rise in costs following the pandemic, some lifecycle work during DPP3 has been deferred to align with allowable spending. For example, refurbishment projects such as transformer maintenance and tower painting were paused over the last couple of years. In the overhead network, the volume of work had to be scaled back.

Within the substation space, replacements for ageing enclosures, switchgear, and LV panels were also deferred to later years. Our replacement programmes focused on addressing assets that have been identified as high risk e.g., proactive replacement of poor condition poles and defective switchgear.

Reprioritisation moving forward

In the context of a strong need for uplift in renewals, high and continuing population growth, electrification of heat and transport, and cost escalation across the sector, our 10-year investment plan continues to flex to best respond to network lifecycle risks, community growth expectations and ensuring that our asset

management and supporting systems evolve to manage the complexity and enhanced service opportunities associated with new technologies.

We are mindful of the energy trilemma, balancing customer affordability with a need to support a sustainable energy future through a reliable and resilient electricity supply. The future also includes uncertainty related to the pace of electrification and the impact of climate and technological change. The culmination of these factors translates into an ongoing need to reprioritise our 10-year investment plan.

When new drivers for investment become apparent within the planning period we will investigate whether a reprioritisation of our plan can be achieved ahead of seeking any reopener of our regulatory allowance. This helps to address affordability for customers and ensures a challenge of our plan which may contain projects or programmes where the driver for investment has changed/reduced, thereby enabling possible deferral. Reprioritisation can be complex but in general we consider three types of prioritised capital investment as outlined in the table below.

Investment category	Description	Investment programme (guide only)
Customer response	Expenditure in this category is largely reactive to customer requests and cannot be deferred if we are to connect new customers in a timely manner, relocate assets (e.g. for road works) and ensure sufficient capacity (N security) in the upstream network to connect new customers	<ul style="list-style-type: none"> • New connections • Asset Relocations • Growth investment related to N security capacity, e.g. LV network
Risk management	This expenditure is related to risks that have been identified as above our risk appetite and will require resolution. There may be some discretion available to defer this expenditure but generally speaking it is preferable to address known risks as soon as possible. In the case of safety it is a requirement in legislation to take 'all reasonable practical steps' to address a safety risk. Risks include safety, compliance, resilience and environment, etc.	<ul style="list-style-type: none"> • Safety related asset renewals • Growth investment related to N-1 or N-2 security in areas without back-feed capability • Non-network risk related initiatives (e.g. asset management software solution (AMSS) to support risk assessment) • High risk resiliency improvement initiatives (e.g. critical resilience related asset renewals/spares) • Reliability investment related to regulatory compliance
Performance/ service optimisation	Investment in this category is related to network and service performance optimisation and is generally supported via cost benefit analysis. This category has the greatest opportunity for deferral through a reprioritisation process. While it is not preferable to defer this investment category from a target performance perspective it may be appropriate to do so if new drivers for investment for competing projects include customer or risk associated attributes described in the higher importance categories above.	<ul style="list-style-type: none"> • Asset renewals to optimise reliability performance • Network configuration reliability improvement beyond compliance • Growth investment related to N-1 or N-2 security in areas of back-feed capability • Lower-level resiliency investment (e.g. small community asset hardening) • Non-network systems support related to investment optimisation

Reopeners

Consideration of the role of regulatory revenue allowance reopener mechanisms to address uncertainty in a changing landscape, across the 10 years of the AMP forecast, is necessary in conjunction with consideration of deferral and reprioritisation. Reopeners are an available mechanism to address investment needs that arise or change during the regulatory period, and we will look to use reopeners within the 10 year investment period where this makes sense and the investment meets the eligibility criteria.

In setting our 10 year asset management investment plan, we have considered the level of uncertainty attached to some investment activities across the period and have removed these from the forecast where a reopener (e.g. contingent project reopener) may be a more appropriate approach. In addition to uncertainty related reopeners, the DPP4 allowance is insufficient to support delivery of all our planned capital work and therefore we are considering whether a 'foreseeable large project reopener' application will be required in FY26 and FY27 prior to the proposed CPP period starting in FY28.

These projects are discussed in the table below.

Reopener projects (contingent CPP and foreseeable large DPP)

Project	Estimated cost range	Trigger	Explanation
Shands Rd zone substation 66kV line connection	>\$5m - <\$15m	Medium to high industrial growth in the Hornby vacant industrial land area, plus decarbonisation of process heat.	Industrial demand uptake is difficult to forecast as customer demand varies from light load warehousing through to intensive industrial load. Our forecast currently shows the capacity being breached outside the 10-year period, but it is probable that a combination of new customers and existing customers decarbonising process heat will accelerate this need.
New substation in Templeton	>\$10m - <\$20m	Large step change in load due to decarbonisation and expansion of prison facilities.	The 11kV distribution network capacity is limited in this area, as it is supplied by a remote substation. Any large increase in load will therefore trigger the need for a new point-of-supply for the distribution network.
New substation in Southbridge	>\$10m - <\$20m	Residential growth in Leeston and Southbridge is higher than our demand forecast.	Our demand forecasting is based on council and Stats NZ population projections. However, growth has historically been above these estimates.
New substation in Rolleston industrial zone	>\$10m - <\$20m	Medium to high industrial growth in the Rolleston vacant industrial land area, plus decarbonisation of process heat at a large dairy factory.	Industrial demand uptake is difficult to forecast as customer demand varies from light load warehousing through to intensive industrial load. Our forecast currently shows the capacity being breached outside the 10-year period, but it is probable that a combination of new customers and existing customers decarbonising process heat will accelerate this need. Rezoning of rural land to industrial is also occurring, and this is not specifically accounted for in our demand forecast.
33kV to 66kV Springston to Motukarara overhead subtransmission conversion and 66kV to 33kV Motukarara substation interface	>\$10m - <\$20m	New large generation and load is proposed for a spaceport (Tāwhaki) at Birdlings Flat	The capacity of the 33kV overhead network to Motukarara and Banks Peninsula is sufficient in the medium term to support the forecast demand growth, but this does not capture large point load developments such as the proposed spaceport.
New capacity to Lyttelton	>\$5m - <\$15m	Lyttelton Port Company plan to expand their facilities to support additional refrigerated containers as well as shore-to-ship electrification for tugboats, ferry services and cruise ships	The 11kV distribution supply to the township of Lyttelton as well as the port is limited due to supply topology and location, as well as the capacity of the overhead lines and single cable through the tunnel. The existing network can support the underlying forecast load growth in the medium term but is forecast to mildly breach the security limit at the end of the 10-year period. Customer specific point load growth is not accounted for in the current forecast.

Customised price-quality path

The network development plan discussed above was updated and restructured with the intention of preparing for a CPP to commence in 2027.

If we are following the default path, certain projects would need to be deferred. The impacts of such deferral include the potential for:

- Reduced reliability or slower capacity expansion
- Exposing customers to longer outages
- Inhibiting our network from fully restoring load during peak load times
- An increase in planned outages due to insufficient alternate supplies
- A reduction in security margin, and hence supply reliability throughout the network.

These impacts may dampen economic growth in the region if we are unable to support new commercial and medium-sized industrial customers without substantially compromising existing customers. Further discussion on our prioritisation rationale is provided in Planning our network.

Connections expenditure

Our base forecast is driven by our best estimate of the number and cost of 'standard' connections over the ten-year period covered by the 2024 Plan. We have updated those forecasts to reflect latest StatsNZ population growth estimates in our region and latest cost per connection forecasts. We considered that customer owned technology may help reduce loads and therefore connections on the network. However, we anticipate a low uptake of off-grid over the AMP period and new connections to our network will be required at the levels we have forecast. Our future forecast is aligned to the average connection expenditure we have witnessed over the last five years.

In 2024, we significantly reduced our forecast for both the number of business customers converting from polluting fuels to electricity and the speed with which they will undertake the conversion. This reflects ongoing conversations with customers that use coal or diesel and the removal of government grants to assist business conversion to non-polluting fuel sources.

Our estimate of contributions from connecting customers has also been adjusted to reflect new contribution rates introduced on 01 April 2025.

Non-network expenditure

There has not been a material change to the overall level of non-network opex from AMP24 to AMP25. This includes no material change for information and communications technology (ICT) expenditure.

The slight opex uplift over the AMP forecast period reflects a need for our workforce capacity and capability to grow to deliver the proposed investment outlined in our revised capital expenditure forecast.

The AMP25 forecast includes a capex estimate for the construction of an extension of the corporate office building. This extension is required as our existing building (built for the business 12 years ago) has reached capacity and will not accommodate the staff required to support the proposed ongoing investment in the network. This additional cost has been forecast to take place across the three years from FY27 to FY29.

Quality of supply

There are currently no material changes to the quality of supply forecast. This may evolve as we progress work on the CPP application referred to in Part 1 and reconsider any impacts on quality particularly for planned work.

New connections

In accordance with the requirements of Clause 2.6.5(c) and Attachment A Clause 17.5 of information disclosure, there have been no material changes to how Orion assess the impact that new demand, generation or storage capacity will have on our network. There have also been no material changes to how we assess and manage the risk to our network from uncertainty regarding new demand, generation or storage capacity.

Innovation

In accordance with the requirements of Clause 17.6 and 17.7 of information disclosure, Orion's updated innovation strategy and innovation practices can be found on our website:

www.oriongroup.co.nz/assets/Your-energy-future/Orion-Innovation-Strategy-FY25-update.pdf

Appendix A: Explanatory Notes

Company name: Orion NZ Ltd

For year ended: 31 March 2026

Schedule 14a Mandatory explanatory notes on forecast information

Box 1: Comment on the difference between nominal and constant price capital expenditure forecasts

In this AMP:

- In the main body of the AMP, unless otherwise stated, we have expressed all dollars in FY25 constant terms
 - In the Report on Forecast Capital Expenditure (Schedule 11a of Appendix A: Disclosure Schedules) we have shown expenditure forecasts in nominal dollar terms and in constant FY25 dollar terms.
- In escalating constant FY25 dollar forecast figures, to nominal dollars we have adopted the same approach used by the Commerce Commission in the EDB DPP4 Final Determination released 20 November 2024 (Input cost inflators model_EDB DPP4 final determination-20 November 2024.xlsx).

Based on the Commerce Commission approach, the inflators used are set out in Table Appendix F1.

Table Appendix F1 - Inflaters used in our capital expenditure forecasts

	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35
Constant FY25\$ to Nominal \$	1.031	1.060	1.089	1.119	1.149	1.180	1.213	1.246	1.280	1.315

Appendix A: Explanatory Notes

Company name: Orion NZ Ltd

For year ended: 31 March 2026

Schedule 14a Mandatory explanatory notes on forecast information

Box 1: Comment on the difference between nominal and constant price capital expenditure forecasts

In this AMP:

- In the main body of the AMP, unless otherwise stated, we have expressed all dollars in FY25 constant terms
- In the Report on Forecast Capital Expenditure (Schedule 11a of Appendix A: Disclosure Schedules) we have shown expenditure forecasts in nominal dollar terms and in constant FY25 dollar terms.

In escalating constant FY25 dollar forecast figures, to nominal dollars we have adopted the same approach used by the Commerce Commission in the EDB DPP4 Final Determination released 20 November 2024 (Input cost inflators model_EDB DPP4 final determination-20 November 2024.xlsx).

Based on the Commerce Commission approach, the inflators used are set out in Table Appendix F1.

Table Appendix F1 - Inflators used in our capital expenditure forecasts

	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35
Constant FY25\$ to Nominal \$	1.031	1.060	1.089	1.119	1.149	1.180	1.213	1.246	1.280	1.315

Box 2: Comment on the difference between nominal and constant price operational expenditure forecasts

In this AMP:

- In the main body of the AMP, unless otherwise stated, we have expressed all dollars in FY25 constant terms
- In the Report on Forecast Operating Expenditure (Schedule 11b of Appendix A: Disclosure Schedules) we have shown expenditure forecasts in nominal dollar terms and in constant dollar terms.

In escalating constant FY25 dollar forecast figures, to nominal dollars we have adopted the same approach used by the Commerce Commission in the EDB DPP4 Final Determination released 20 November 2024 (Input cost inflators model_EDB DPP4 final determination-20 November 2024.xlsx).

Based on the Commerce Commission approach, the inflators used are set out in Table Appendix F2.

Table Appendix F2 - Inflators used in our operating expenditure forecasts

	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35
Constant FY25\$ to Nominal \$	1.032	1.058	1.084	1.111	1.139	1.168	1.197	1.227	1.258	1.290

Appendix A: Explanatory Notes

Schedule 15 Voluntary Explanatory Notes

1. This schedule enables an EDB to provide, should it wish to-
 - 1.1. additional explanatory comment to reports prepared in accordance with clauses 2.3.1, 2.4.21, 2.4.22, 2.5.1, 2.5.2, and 2.6.6;
 - 1.2. information on any substantial changes to information disclosed in relation to a prior disclosure year, as a result of final wash-ups.
2. Information in this schedule is not part of the audited disclosure information, and so is not subject to the assurance requirements specified in section 2.8.
3. Provide additional explanatory comment in the box following.

Box 1: Voluntary explanatory comment on disclosed information

Conditional Exemption – Schedule 11b

The Commerce Commission (Commission) has granted Orion a conditional exemption from publicly disclosing ‘non-network solutions provided by a related party or third party’ and related information in this FY25 AMP disclosure.

Specifically, Orion has been exempted from publicly disclosing the opex subcategories of ‘system operations and network support’ and ‘non-network solutions provided by a related party or third party’ in cells I15 to K15, I17 to K17, I28 to K28, I30 to K30, I49 to K49, I51 to K51 of Schedule 11b, as required by clause 2.6.6(1)(b) of the ID Determination. Orion will, however, provide this information as a Commission-only disclosure.

Orion sought this exemption on the basis that the forecast is commercially sensitive, since it:

- is a payment to one provider for one site;
- would reveal commercially sensitive information;
- would breach confidentiality with the provider; and
- would inappropriately signal price to the market.

Appendix B: Disclosure Schedules

Schedule 11a Report on forecast capital expenditure

	Current Year CY	CY+1	CY+2	CY+3	CY+4	CY+5	CY+6	CY+7	CY+8	CY+9	CY+10
7											
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11a(i): Expenditure on Assets Forecast											
\$'000 (in nominal dollars)											
Consumer connection	36,675	36,525	39,701	40,108	39,927	41,859	43,521	44,272	46,028	46,812	48,811
System growth	26,989	37,779	25,800	42,445	48,102	48,152	52,101	44,659	54,115	57,879	68,767
Asset replacement and renewal	30,953	64,934	97,911	135,671	151,933	177,361	175,751	183,073	197,460	215,755	225,115
Asset relocations	5,611	3,885	3,790	3,893	3,998	4,106	4,218	4,334	4,452	4,573	4,698
Reliability, safety and environment:											
Quality of supply	-	1,659	1,333	4,653	5,987	2,657	2,798	2,946	2,833	2,911	2,990
Legislative and regulatory	-	309	318	327	336	345	354	364	374	384	394
Other reliability, safety and environment	10,088	8,978	7,708	1,874	806	827	850	873	897	921	947
Total reliability, safety and environment	10,088	10,946	9,360	6,854	7,128	3,829	4,003	4,183	4,104	4,216	4,331
Expenditure on network assets	110,315	153,869	176,560	228,971	251,088	275,307	279,594	280,500	306,158	329,235	351,723
Expenditure on non-network assets	14,400	22,040	12,908	22,813	19,259	11,735	17,834	14,596	11,619	19,179	12,501
Expenditure on assets	124,715	175,909	189,468	251,784	270,347	287,042	297,428	295,096	317,777	348,414	364,224
plus											
Cost of financing	839	954	1,700	3,310	3,230	5,053	4,048	4,992	5,422	3,551	6,613
less	9,344	10,552	10,853	11,149	11,450	11,760	12,081	12,410	12,749	13,097	13,455
plus											
Capital expenditure forecast	116,210	166,311	180,316	243,945	262,128	280,336	289,395	287,677	310,450	338,868	357,382
Assets commissioned	136,371	143,996	149,732	245,887	227,809	301,630	257,216	281,057	355,136	262,394	465,983
Current Year CY											
\$'000 (in constant prices)											
Consumer connection	36,675	35,424	37,439	36,818	35,689	36,429	36,869	36,509	36,949	36,580	37,127
System growth	26,989	36,641	24,330	38,963	42,995	41,906	44,138	36,811	43,440	45,227	52,307
Asset replacement and renewal	30,953	62,977	92,332	124,543	135,805	154,355	148,890	150,971	158,508	168,592	171,232
Asset relocations	5,611	3,574	3,574	3,574	3,574	3,574	3,574	3,574	3,574	3,574	3,574
Reliability, safety and environment:											
Quality of supply	-	1,609	1,257	4,272	5,351	2,312	2,371	2,429	2,274	2,274	2,274
Legislative and regulatory	-	300	300	300	300	300	300	300	300	300	300
Other reliability, safety and environment	10,088	8,708	7,269	1,720	720	720	720	720	720	720	720
Total reliability, safety and environment	10,088	10,617	8,826	6,292	6,371	3,332	3,391	3,449	3,294	3,294	3,294
Expenditure on network assets	110,315	149,232	166,501	210,189	224,434	239,597	236,861	231,314	245,765	257,266	267,535
Expenditure on non-network assets	14,400	21,276	12,172	20,941	17,215	10,213	15,108	12,036	9,327	14,986	9,509
Expenditure on assets	124,715	170,507	178,673	231,131	241,649	249,810	251,970	243,351	255,091	272,252	277,043
Subcomponents of expenditure on assets (where known)											
Energy efficiency and demand side management, reduction of energy losses											
Overhead to underground conversion											
Research and development											

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Schedule 11a Report on forecast capital expenditure

[illegible]

Schedule 11a Report on forecast capital expenditure

[illegible]

Schedule 11b Report on forecast operational expenditure

	Current Year CY	CY+1	CY+2	CY+3	CY+4	CY+5	CY+6	CY+7	CY+8	CY+9	CY+10
7											
8											
9	Operational Expenditure Forecast										
10	\$000 (in nominal dollars)										
11	13,070	13,689	14,772	15,336	15,946	16,582	17,239	17,921	18,631	19,369	20,136
12	5,149	5,906	6,558	7,878	9,273	10,166	11,096	11,470	11,857	12,257	12,672
13	12,927	15,618	18,350	19,955	20,286	23,325	24,167	25,039	25,945	26,883	27,857
14	1,572	1,645	1,711	1,776	1,847	1,921	1,997	2,076	2,158	2,243	2,332
15	32,719	36,860	41,391	44,946	47,353	51,994	54,498	56,506	58,590	60,253	62,997
16	System operations and network support										
17	38,480	43,094	39,814	-	43,211	29,135	30,539	32,267	34,130	36,072	38,027
18	Business support										
19	59,269	63,617	61,335	69,088	74,211	78,325	83,931	88,634	94,023	99,454	104,983
20	91,988	100,477	102,726	113,634	121,564	130,319	138,430	145,140	152,614	160,207	167,980
21	Non-network opex										
22	Operational expenditure										
23	13,070	13,262	13,956	14,153	14,352	14,554	14,760	14,968	15,179	15,393	15,610
24	5,149	5,722	6,196	7,270	8,346	8,923	9,501	9,580	9,660	9,741	9,823
25	12,927	15,131	17,337	18,046	18,258	20,473	20,692	20,913	21,137	21,365	21,596
26	1,572	1,594	1,616	1,639	1,662	1,686	1,709	1,734	1,758	1,783	1,808
27	32,719	35,708	39,105	41,108	42,619	45,636	46,662	47,194	47,734	48,281	48,837
28	System operations and network support										
29	38,480	41,748	37,615	23,880	24,979	25,572	26,147	26,950	27,806	28,668	29,495
30	Business support										
31	59,269	61,630	57,947	63,756	66,792	68,749	71,862	74,027	76,602	79,038	81,386
32	91,988	97,339	97,052	104,865	109,410	114,385	118,524	121,220	124,335	127,320	130,223
33	Non-network opex										
34	Subcomponents of operational expenditure (where known)										
35	Energy efficiency and demand side management, reduction of energy losses										
36	Direct billing *										
37	Research and Development										
38	Insurance										
39	3,477	3,764	4,074	4,409	4,770	5,159	5,581	6,036	6,526	7,056	7,621
40	* Direct billing expenditure by suppliers that direct bill the majority of their consumers										
41											
42											
43	Difference between nominal and real forecasts										
44	\$000										
45	-	428	816	1,184	1,594	2,027	2,479	2,954	3,452	3,976	4,526
46	-	184	362	603	927	1,243	1,596	1,880	2,197	2,516	2,848
47	-	488	1,014	1,509	2,038	2,852	3,475	4,127	4,807	5,519	6,262
48	-	51	94	137	185	235	287	342	400	461	524
49	-	1,131	2,286	3,438	4,734	6,357	7,837	9,312	10,856	12,471	14,160
50	System operations and network support										
51	-	1,346	2,199	3,335	4,645	6,014	7,678	9,289	11,098	13,011	15,045
52	Business support										
53	-	-	-	-	-	-	-	-	-	-	-
	-	1,987	3,388	5,332	7,419	9,577	12,069	14,607	17,422	20,416	23,598
	Non-network opex										
	-	3,138	5,674	8,770	12,153	15,934	19,906	23,920	28,278	32,887	37,758
	Operational expenditure										

Schedule 11c : Cybersecurity Expenditure Forecast Provided directly to the Commerce Commission

Schedule 12a Report on asset condition

Asset condition at start of planning period (percentage of units by grade)												
	Voltage	Asset category	Asset class	Units	H1	H2	H3	H4	H5	Grade unknown	Data accuracy (1-4)	% of asset forecast to be replaced in next 5 years
7												
8												
9												
10	All	Overhead Line	Concrete poles / steel structure	No.	0.85%	0.40%	2.94%	6.55%	89.27%		4	1.52%
11	All	Overhead Line	Wood poles	No.	1.89%	3.32%	11.88%	18.35%	64.56%		4	7.02%
12	All	Overhead Line	Other pole types	No.	-	-	-	-	-		N/A	-
13	HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km	1.82%	0.57%	3.04%	4.80%	89.78%		3	1.31%
14	HV	Subtransmission Line	Subtransmission OH 110kV+ conductor	km	-	-	-	-	-		N/A	-
15	HV	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km	0.04%	0.12%	1.98%	8.78%	89.09%		3	0.50%
16	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km	9.43%	18.25%	52.64%	17.55%	2.14%		3	13.14%
17	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Gas pressurised)	km	-	-	-	-	-		N/A	-
18	HV	Subtransmission Cable	Subtransmission UG up to 66kV (PILC)	km	2.71%	6.72%	39.69%	37.21%	13.66%		3	11.41%
19	HV	Subtransmission Cable	Subtransmission UG 110kV+ (XLPE)	km	-	-	-	-	-		N/A	-
20	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Oil pressurised)	km	-	-	-	-	-		N/A	-
21	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Gas Pressurised)	km	-	-	-	-	-		N/A	-
22	HV	Subtransmission Cable	Subtransmission UG 110kV+ (PILC)	km	-	-	-	-	-		N/A	-
23	HV	Subtransmission Cable	Subtransmission submarine cable	km	-	-	-	-	-		N/A	-
24	HV	Zone substation Buildings	Zone substations up to 66kV	No.	9.41%	-	3.53%	3.53%	83.53%		3	4.71%
25	HV	Zone substation Buildings	Zone substations 110kV+	No.	-	-	-	-	-		N/A	-
26	HV	Zone substation switchgear	22/33kV CB (Indoor)	No.	-	-	-	-	100.00%		3	-
27	HV	Zone substation switchgear	Zone substations CB (Outdoor)	No.	7.69%	23.08%	53.85%	11.54%	3.85%		3	23.08%
28	HV	Zone substation switchgear	33kV Switch (Ground Mounted)	No.	-	-	-	-	-		N/A	-
29	HV	Zone substation switchgear	33kV Switch (Pole Mounted)	No.	-	-	32.58%	3.00%	64.42%		3	1.87%
30	HV	Zone substation switchgear	33kV RMU	No.	-	-	-	-	-		N/A	-
31	HV	Zone substation switchgear	50/66/110kV CB (Indoor)	No.	-	-	-	-	-		N/A	-
32	HV	Zone substation switchgear	50/66/110kV CB (Outdoor)	No.	-	4.69%	0.78%	1.56%	92.97%		3	-
33	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.	-	18.06%	4.72%	3.61%	73.61%		3	14.17%
34	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (pole mounted)	No.	-	-	-	-	-		N/A	-

Schedule 12a Report on asset condition

Asset condition at start of planning period (percentage of units by grade)												
	Voltage	Asset category	Asset class	Units	H1	H2	H3	H4	H5	Grade unknown	Data accuracy (1-4)	% of asset forecast to be replaced in next 5 years
36					-	3.53%	12.94%	43.53%	40.00%		3	12.94%
37					0.03%	0.07%	0.62%	2.36%	96.93%		3	0.94%
					-	-	-	-	-		N/A	
38	HV	Zone Substation Transformer	Zone Substation Transformers	No.								
39	HV	Distribution Line	Distribution OH Open Wire Conductor	km								
40	HV	Distribution Line	Distribution OH Aerial Cable Conductor	km								
41	HV	Distribution Line	SWER conductor	km								
42	HV	Distribution Cable	Distribution UG XLPE or PVC	km								
43	HV	Distribution Cable	Distribution UG PILC	km								
44	HV	Distribution Cable	Distribution Submarine Cable	km								
45	HV	Distribution switchgear	3.3/6.6/11/22kV CB (pole mounted) - reclosers and sectionalisers	No.								
46	HV	Distribution switchgear	3.3/6.6/11/22kV CB (indoor)	No.								
47	HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.								
48	HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.								
49	HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.								
50	HV	Distribution Transformer	Pole Mounted Transformer	No.								
51	HV	Distribution Transformer	Ground Mounted Transformer	No.								
52	HV	Distribution Transformer	Voltage regulators	No.								
53	HV	Distribution Substations	Ground Mounted Substation Housing	No.								
54	HV	LV Line	LV OH Conductor	km								
55	LV	LV Cable	LV UG Cable	km								
56	LV	LV Streetlighting	LV OH/UG Streetlight circuit	km								
57	LV	Connections	OH/UG consumer service connections	No.								
58	LV	Protection	Protection relays (electromechanical, solid state and numeric)	No.								
59	All	SCADA and communications	SCADA and communications equipment operating as a single system	Lot								
60	All	Capacitor Banks	Capacitors including controls	No.								
61	All	Load Control	Centralised plant	Lot								
62	All	Load Control	Relays	No.								
63	All	Load Control	Cable Tunnels	km								
64	All	Civils										

Schedule 12b Report on forecast capacity

12b(i) System Growth - Zone Substations																				
Existing Zone Substations	Current peak load (MVA)	Installed operating capacity (MVA)	Current security of supply classification (type)	Current constraint type	Current available capacity (MVA)	Peak load period <5 yrs	Available capacity <5 yrs (MVA)	Security of supply classification <5 yrs (type)	Peak load period <10 yrs	Min. available capacity >10 yrs (MVA)	Max. available capacity >10 yrs (MVA)	Security of supply classification >10 yrs (type)	Forecast constraint type	Year of any forecast constraint	Constraint primary case	Constraint solution type	Constraint solution progress	Temporary constraint solution remaining lifespan	Explanation	
9 ADDINGTON #1	18	37.4	N-1	No constraint	19	Winter	17	N-1	Winter	12	18	N-1	No constraint	none	Not applicable	Not applicable	Not applicable	Not applicable		
10 ADDINGTON #2	22	30.0	N-1	No constraint	8	Winter	6	N-1	Winter	{0}	6	N-1	Capacity	10+	Zone substation transformer	Network upgrade	Solution confirmed	Not applicable	Power transformers are to be replaced due to asset lifecycle drivers with Orion's standard class so capacity will be gained	
11 ANNAH	4	8.0	N-1 switched	No constraint	4	Summer	4	N-1 switched	Summer	3	4	N-1 switched	No constraint	none	Not applicable	Not applicable	Not applicable	Not applicable		
12 ARMAGH	20	38.8	N-1	No constraint	18	Winter	15	N-1	Winter	9	16	N-1	No constraint	none	Not applicable	Not applicable	Not applicable	Not applicable		
13 BANKSIDE	4	9.4	N-1 switched	No constraint	6	Summer	5	N-1 switched	Summer	4	5	N-1 switched	No constraint	none	Not applicable	Not applicable	Not applicable	Not applicable		
14 BARNETT PARK	10	15.0	N-1 switched	No constraint	5	Winter	5	N-1 switched	Winter	3	5	N-1 switched	No constraint	none	Not applicable	Not applicable	Not applicable	Not applicable		
15 BELFAST	6	15.0	N-1 switched	No constraint	9	Winter	8	N-1 switched	Winter	37	39	N-1	No constraint	none	Not applicable	Not applicable	Not applicable	Not applicable		
16 BROWLEY	39	47.6	N-1	No constraint	9	Winter	3	N-1	Winter	{0}	5	N-1	Security	9	Zone substation transformer	Undecided	No active planning	Not applicable		
17 BROOKSIDE	8	10.0	N-1 switched	No constraint	2	Summer	1	N-1 switched	Summer	{2}	1	N-1 switched	Capacity	8	Zone substation transformer	Undecided	No active planning	Not applicable	Likely to be solved by load transfer through multiple load shifts. Tied in with Liscione and surrounds growth contingent project	
18 DALINGTON	28	38.8	N-1 switched	Security	11	Winter	10	N-1 switched	Winter	4	10	N-1	No constraint	none	Subtransmission circuit	Network upgrade	Planning stage	Not applicable	New subtransmission project will restore full N-1 NPSA	
19 DARFIELD	5	9.6	N-1 switched	No constraint	4	Summer	2	N-1 switched	Summer	{4}	0	N-1 switched	Capacity	8	Zone substation transformer	Divert load to alternative substation	Planning stage	Not applicable	New replacement larger capacity substation to be built to replace existing	
20 DIAMOND HARBOUR	3	8.7	N-1 switched	No constraint	6	Winter	6	N-1 switched	Winter	4	5	N-1 switched	No constraint	none	Not applicable	Not applicable	Not applicable	Not applicable		
21 DUNDEAL	20	23.8	N-1	No constraint	4	Summer	1	N-1	Summer	{13}	1	N-1	Capacity	8	Zone substation transformer	Undecided	No active planning	Not applicable	Large industrial customer driving load growth so we'll work with them for any significant changes	
22 DUVAUCHELLE	5	8.3	N-1	No constraint	4	Summer	4	N-1	Summer	2	3	N-1	No constraint	none	Not applicable	Not applicable	Not applicable	Not applicable		
23 FENDALTON	36	42.0	N-1	No constraint	6	Winter	4	N-1	Winter	{9}	5	N-1	Security	10+	Zone substation transformer	Divert load to alternative substation	No active planning	Not applicable		
24 GREENDALE	6	10.0	N-1 switched	No constraint	4	Summer	3	N-1 switched	Summer	1	3	N-1 switched	Capacity	10+	Zone substation transformer	Divert load to alternative substation	Planning stage	Not applicable	Load to be diverted to future Norwood substation transformer	
25 HALSWELL	21	23.8	N-1	No constraint	3	Winter	0	N-1	Winter	17	24	N-1	No constraint	none	Not applicable	Not applicable	Not applicable	Not applicable		
26 HAWTHORNHILL	34	38.8	N-1	No constraint	5	Winter	{9}	N-1	Winter	{25}	{11}	N-1	Capacity	3	Zone substation transformer	Divert load to alternative substation	Planning stage	Not applicable	New substation is planned to resolve this constraint	
27 HEATHCOTE	29	38.8	N-1	No constraint	9	Winter	6	N-1	Winter	{11}	4	N-1	Capacity	10+	Zone substation transformer	Undecided	No active planning	Not applicable		
28 HIGHFIELD	9	10.0	N-1 switched	No constraint	1	Summer	0	N-1 switched	Summer	{2}	0	N-1 switched	Capacity	6	Zone substation transformer	Divert load to alternative substation	Planning stage	Not applicable	Load to be diverted to future Norwood substation transformer and future Creyke Rd substation	
29 HILLS RD	7	9.9	N-1 switched	No constraint	3	Summer	2	N-1 switched	Summer	{1}	2	N-1 switched	Capacity	10+	Zone substation transformer	Divert load to alternative substation	Planning stage	Not applicable	Contingent project to construct new substation to enable Hills Rd substation offload	
30 HOON HAY	32	38.8	N-1	No constraint	6	Winter	5	N-1	Winter	{4}	4	N-1	No constraint	10+	Zone substation transformer	Undecided	No active planning	Not applicable		
31 HORNBY	14	22.8	N-1	No constraint	9	Winter	7	N-1	Winter	3	7	N-1	No constraint	none	Not applicable	Not applicable	Not applicable	Not applicable		
32 HONORATA	8	9.6	N-1 switched	No constraint	1	Summer	1	N-1 switched	Summer	{1}	1	N-1 switched	Capacity	9	Zone substation transformer	Divert load to alternative substation	No active planning	Not applicable	Offload to Bankside and/or new Creyke substation	

Schedule 12b Report on forecast capacity

33	ILAM	9	Winter	11.8	N-1	No constraint	3	Winter	3	N-1	1	3	N-1	No constraint	none	Not applicable	Not applicable	Not applicable	Not applicable	Load transfer to Dunsandel
34	KILINCHY	9	Summer	10.0	N-1 switched	No constraint	1	Summer	(0)	N-1	(3)	(0)	N-1	Capacity	4	Zone substation transformer	Divert load to alternative substation	Planning stage	Not applicable	
35	KIMBERLEY	15	Summer	23.8	N-1	No constraint	9	Summer	7	N-1	3	8	N-1	No constraint	none	Not applicable	Not applicable	Not applicable	Not applicable	
36	LANCASTER	23	Winter	47.6	N-1 switched	No constraint	24	Winter	20	N-1 switched	11	21	N-1 switched	No constraint	none	Not applicable	Not applicable	Not applicable	Not applicable	
37	LARCUMB	21	Winter	23.8	N-1	No constraint	2	Winter	(6)	N-1	(22)	(8)	N-1	Security	1	Zone substation transformer	Divert load to alternative substation	Solution confirmed	Not applicable	Load transfer to Rolleston and Springfield
38	LINCOLN	10	Winter	11.1	N-1	No constraint	1	Winter	(3)	N-1	(10)	(7)	N-1	Capacity	2	Zone substation transformer	Divert load to alternative substation	Planning stage	Not applicable	Load transfer to new Collins substation
39	LITTLE RIVER	1	Winter	2.8	N	No constraint	2	Winter	2	N	2	2	N	No constraint	none	Not applicable	Not applicable	Not applicable	Not applicable	
40	MCFADDENS	35	Winter	38.8	N-1	No constraint	4	Winter	(9)	N-1	(7)	1	N-1	Security	4	Zone substation transformer	Divert load to alternative substation	Planning stage	Not applicable	Load transfer to Belfast
41	MIDDLETON	28	Winter	45.7	N-1	No constraint	17	Winter	9	N-1	(2)	22	N-1	No constraint	none	Not applicable	Not applicable	Not applicable	Not applicable	
42	MILTON	37	Winter	42.0	N-1	No constraint	5	Winter	1	N-1	(9)	2	N-1	No constraint	8	Zone substation transformer	Divert load to alternative substation	Planning stage	Not applicable	Load transfer to Addington and Lancaster
43	MOFFETT ST	17	Winter	22.8	N-1	No constraint	6	Winter	4	N-1	(2)	4	N-1	No constraint	10+	Zone substation transformer	Divert load to alternative substation	No active planning	Not applicable	Load transfer to neighbouring zone substations
44	MOTUKARAMA	3	Summer	8.0	N-1	No constraint	5	Summer	4	N-1	3	4	N-1	No constraint	none	Not applicable	Not applicable	Not applicable	Not applicable	
45	OXFORD-TUAM	21	Winter	38.8	N-1	No constraint	18	Winter	15	N-1	10	16	N-1	No constraint	none	Not applicable	Not applicable	Not applicable	Not applicable	
46	PAPAKURI	38	Winter	50.4	N-1	No constraint	33	Winter	9	N-1	(1)	11	N-1	No constraint	10+	Zone substation transformer	Divert load to alternative substation	No active planning	Not applicable	Load transfer to Belfast
47	PREBLETON	8	Winter	15.0	N-1 switched	No constraint	7	Winter	6	N-1 switched	10	14	N-1	No constraint	none	Not applicable	Not applicable	Not applicable	Not applicable	
48	RAWHITI	33	Winter	38.8	N-1 switched	Security	6	Winter	7	N-1 switched	1	7	N-1	No constraint	none	Not applicable	Not applicable	Not applicable	Not applicable	
49	ROLLESTON	13	Winter	9.8	N-1	Capacity	(3)	Winter	(6)	N-1	(11)	(5)	N-1	Security	1	Zone substation transformer	Divert load to alternative substation	Implementation stage	Not applicable	Load transfer to new Rolleston substation
50	SHANDS RD	16	Winter	22.9	N-1	No constraint	7	Winter	5	N-1	1	5	N-1	No constraint	none	Not applicable	Not applicable	Not applicable	Not applicable	
51	SOGBURN	25	Winter	36.5	N-1	No constraint	12	Winter	7	N-1	(1)	9	N-1	No constraint	10+	Zone substation transformer	Divert load to alternative substation	Planning stage	Not applicable	Load transfer to Middleton
52	SPRINGSTON	11	Winter	23.8	N-1 switched	No constraint	13	Winter	11	N-1	6	11	N-1	Security	none	Not applicable	Not applicable	Not applicable	Not applicable	
53	TE PIRITA	9	Summer	10.0	N-1 switched	No constraint	1	Summer	0	N-1 switched	(2)	0	N-1 switched	No constraint	6	Zone substation transformer	Divert load to alternative substation	Planning stage	Not applicable	Load transfer to Bankside
54	WAIKAKARURI	21	Winter	47.6	N-1 switched	Security	27	Winter	26	N-1 switched	19	26	N-1 switched	Security	1	Subtransmission circuit	Divert load to alternative substation	Not applicable	Not applicable	Does not meet security of supply standard but can be quickly restored via 66kV switching
55	WEEDONS	15	Winter	23.8	N-1	No constraint	9	Winter	8	N-1	(0)	7	N-1	No constraint	10+	Zone substation transformer	Divert load to alternative substation	No active planning	Not applicable	Load transfer to new Rolleston substation

Schedule 12c Report on forecast network demand

7

12c(i): Consumer Connections

8

Number of ICPs connected during year by consumer type

9

10

11

Consumer types defined by EDB *

12

Residential

13

Non-residential

14

15

16

17

Connections total

18

*include additional rows if needed

19

20

21

22

Distributed generation

23

Number of connections made in year

24

Capacity of distributed generation installed in year (MVA)

25

12c(ii) System Demand

26

27

Maximum coincident system demand (MW)

28

GXP demand

29

plus Distributed generation output at HV and above

30

Maximum coincident system demand

31

less Net transfers to (from) other EDBs at HV and above

32

Demand on system for supply to consumers' connection points

33

Electricity volumes carried (GWh)

34

Electricity supplied from GXPs

35

less Electricity exports to GXPs

36

plus Electricity supplied from distributed generation

37

less Net electricity supplied to (from) other EDBs

38

Electricity entering system for supply to ICPs

39

less Total energy delivered to ICPs

40

Losses

41

42

Load factor

43

Loss ratio

7

8

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12d Report on forecast interruptions and duration

	Current Year CY	CY+1	CY+2	CY+3	CY+4	CY+5
8						
9						
10						
11						
12						
13						
14						
15						

SAIDI

Class B (planned interruptions on the network)

Class C (unplanned interruptions on the network)

13.2	17.1	17.1	17.1	17.1	17.1	17.1
66.5	63.1	63.1	63.1	63.1	63.1	63.1

SAIFI

0.02	0.06	0.06	0.06	0.06	0.06	0.06
0.84	0.80	0.80	0.80	0.80	0.80	0.80

Appendix C:

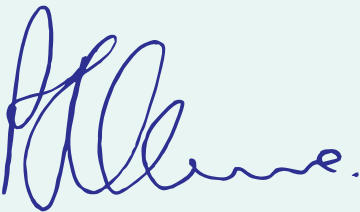
Certificate for Year- beginning disclosures

Schedule 17 Certification for Year-beginning Disclosures

Clause 2.9.1

We, Paul Munro and Mike Sang, being directors of Orion New Zealand Limited certify that, having made all reasonable enquiry, to the best of our knowledge:


- a. the following attached information of Orion New Zealand Limited prepared for the purposes of clauses 2.4.1, 2.6.1, 2.6.3, 2.6.6 and 2.7.2 of the Electricity Distribution Information Disclosure Determination 2012 in all material respects complies with that determination.
- b. The prospective financial or non-financial information included in the attached information has been measured on a basis consistent with regulatory requirements or recognised industry standards.
- c. The forecasts in Schedules 11a, 11b, 11c, 12a, 12b, 12c and 12d are based on objective and reasonable assumptions which both align with Orion New Zealand Limited’s corporate vision and strategy and are documented in retained records.



Director

27 March 2025

Date



Director

27 March 2025

Date

Orion

Orion New Zealand Limited
565 Wairakei Road

PO Box 13896
Christchurch 8140

+64 3 363 9898
oriongroup.co.nz