
vector
2025—2035
electricity asset
management plan update

Contents

1 – Changing operating environment and strategic response

In March 2024, we published a full Asset Management Plan (AMP), including detailed descriptions of our asset management system and investment forecasts. Building on that foundation, this 2025 AMP is an update that focuses only on the most significant developments and changes from the past year.

1.1 Key changes in our operating environment

As we outlined in our 2024 AMP, electricity distribution businesses (EDBs) face the need for unprecedented investment to support customer demand growth, electrification of transport and heating, and be resilient against climate change. Meeting this need efficiently for our customers is crucial. This means delivering the infrastructure that's fit for the future while ensuring customer costs are only what they need to be to deliver that infrastructure, and no higher. There's now much uncertainty from rapid technological innovation and changing customer behaviours and preferences. This makes it increasingly difficult to align planning horizons for our electricity infrastructure, which typically has a life of more than 40 years. Since our 2024 AMP we have observed this uncertainty increase due to several factors, described below.

Despite these uncertainties, we continue to follow our Symphony strategy, which seeks to actively shape the energy future by thinking outside traditional solutions, and leveraging innovative technology, data and customer solutions to chart a more cost-efficient path as the network continues to grow and evolve in step with customer demand. This culture of innovation is critical from an organisational perspective to enable us to deliver on customer, network and stakeholder objectives, including affordability and reliability.

1.1.1 CHANGES OUTSIDE VECTOR

UNCERTAIN IMPACT ON SYSTEM GROWTH FROM HYPERSCALE DATA CENTRES

Auckland faces unique challenges from customers wanting to connect hyperscale data centres, the scale of which is currently not seen anywhere else in New Zealand. This is because data centre customers seek to locate facilities in Auckland due to its proximity to demand and connectivity to the global fibre backbone. We receive many more customer connection requests for hyperscale data centres than we did just a few years ago. These requests are complex, large, and have significant impact on our future planning for the part of the network they are located in. For example, hyperscale data centres typically request 20MVA in the first phase of multi-stage developments, which is roughly equivalent to 8,500 homes. We know these hyperscale data centre requests will drive a need for us to invest in system growth. There is significant uncertainty however around the rate at which demand will grow to match the capacity requested since this depends on adoption of data centre services by the data centre's clients, the type of services run at the data centre, and most importantly, how customers choose to use these new services. Artificial Intelligence (AI) operations and services typically use much more electricity than other types of digital operations, so if customers choose to embrace these services we expect to see strongly increased demand requirements.

Customer data centre connection requests are dynamic as they involve several stages over multiple years in a competitive global market. Not all requests will progress to be developed, and plans may change significantly along the way.

Hyperscale data centres represent a great opportunity for Auckland and New Zealand, and we're continuing to work with our data centre customers to meet their needs while ensuring investments in system growth are made at the right time for the wider network.

UNCERTAINTY OVER THE RATE OF TRANSPORT ELECTRIFICATION AND ITS IMPACT ON SYSTEM GROWTH

Customer electric vehicle uptake has continued at a reduced rate compared to what was observed over 2022-2023. This was signalled at the time of publication of our 2024 AMP and has now been formalised as part of our demand forecast. Customers are choosing to buy fewer EVs, perhaps because of the removal of financial incentives, together with increased cost of living and inflation.

In the past year we've also seen the timing for a major public transport electrification project change, which impacted wider network reinforcement planning.

Overall, the impact on system growth driven by electrification of transport, both public and private, remains changeable and uncertain in the near term.

POTENTIAL FOR REGULATORY IMPACTS

The pace of change and uncertainty in the energy sector today makes it more important than ever that regulation evolves fast enough while maintaining its effectiveness, and coherence over the long term. A challenge to this is that long-term strategic direction in energy policy is set at a political level, and that political direction is subject to democratic volatility, which can in turn influence regulatory priorities. This means long-term energy policy can change relatively frequently, or remain uncertain, at just the time that certainty is required for long-term investment planning. Described below are some of the key regulatory issues which have strong potential to impact our investment planning in the near term, depending on whether regulatory change is certainty is left unresolved.

SMART EV CHARGING:

We've previously signalled the opportunity in smart electric vehicle charging to keep the customer costs down, by orchestrating charging away from peak periods. This minimises the need for extra network reinforcement driven by electric vehicle charging. As there's still a lack of regulatory support to enable this, we must take a conservative view where the contribution to peak demand from EV adoption is unable to be minimised through orchestration. Under this forecast, the customer cost of EV adoption is higher than it needs to be.

PROPOSED CHANGES TO CAPITAL CONTRIBUTIONS:

The Electricity Authority is proposing to amend the Electricity Industry Participation Code 2010 to introduce regulation around connection charges (taking effect from 1 April 2026). Most significantly, the Authority proposes to introduce a 'reliance limit' on the ability of EDBs to fund connection and system growth investment through capital contributions. For Vector, this would limit capital contributions to 82% of connection and system growth expenditure.

Vector's capital expenditure allowance for DPP4 (default price-quality path) was based on the assumption that 100% of growth capex would be funded through capital contributions, as is our current policy.

If the 82% reliance limit is implemented, the Authority's analysis is Vector would require a 15% increase in capex over the last four years of DPP4 requiring an additional $28.25 million of maximum allowable revenue over the same period. We estimate the reliance limit will require an increase in net capex of ~$140m over DPP4 for the regulatory years RY27-RY30.

If these changes are implemented as proposed, the balance of system growth capex no longer funded by connecting customers would need to be recovered in other ways. S54V of the Electricity Industry Act 2010 requires the Commerce Commission to reconsider a price-path (and amend it if it considers it necessary or desirable) if requested by the Authority, to take account of changes to the Code. We consider this would be the only mechanism available to ensure these costs are recovered and note that it would result in higher costs to existing customers through increased lines charges.

COST PRESSURES

We've continued to see significant cost pressure throughout our supply chain. Our primary equipment cost is largely driven by global demand, with the need for more investment in electricity networks globally a major factor putting pressure on prices we pay in New Zealand. We're also seeing an increase in commodity prices, driven by a range of factors, that is impacting our equipment costs. Additionally, the current low NZD exchange rate is impacting import costs, resulting in increased expenditure across the supply chain.

TEMPORARY TRAFFIC MANAGEMENT

Rising costs and changing approaches relating to temporary traffic management (TTM) are impacting our asset management and works delivery programmes. Ensuring public and worker safety remains our top priority. Customers expect minimal disruption to roads and public spaces, Auckland Transport (AT) is proposing new restrictions on peak-hour roadwork and TTM costs have increased sharply in recent years. We continue to work with our community and AT to ensure reliable supply, support growth, and minimize disruptions as cost effectively as possible.

1.2 Our strategic response - how we are responding to these changes

INCREASED ALLOWANCES FOR INVESTMENT IN CYBER, DATA, INSURANCE AND CUSTOMER

In November 2024 the Commerce Commission announced the terms of the next five-year regulatory cycle, including our revenue. The next cycle includes increased operational allowances for several categories we've identified as critical, and which we've been investing in already for some time. These categories include cyber security, smart meter data acquisition and handling, insurance in light of increasing cost to repair from climate events, and customer engagement. We commend the Commission for recognising the importance of these categories and will continue our investment in each of these to benefit our customers.

Our smart meter data programme is well advanced and continues to evolve. In the past year we've begun analysing power quality data to determine from which low-voltage phase of the distribution transformer each individual connection is supplied. This has the potential to help us in a number of ways, most notably in improving the accuracy of our targeted communications to customers ahead of planned work in their area.

This is one example of how we're building a network of data capabilities and visibility to increase our understanding of customer preferences and network performance, to help us manage uncertainty.

MAINTENANCE CHANGES

Our risk-based approach to asset maintenance has continued to evolve, with significant changes currently being implemented. As we've had a risk-based model in place for several years now, we reviewed its effectiveness and identified areas where we could improve customer outcomes by leveraging technology that has matured to a point where it opens up opportunity to do things differently.

An example is that we're now surveying asset conditions by aerial imagery, using drones and helicopters, rather than ground-based observations. This gives us much richer data on asset health, and as further surveys are done we'll build up a comprehensive, up-to-date timeline of the condition of all our overhead assets. Through our partnership with X, formerly Google X, the GridAware tool on the Tapestry platform will enable us to further enhance our asset inspection practice by using machine learning to identify defects. The motivation is to vastly accelerate the time taken for asset surveying and inspection. As this will mean we're better able to identify defects efficiently across a broader range of asset types, we plan to move some maintenance investment from planned to corrective, reflecting that we spend less time assessing potential concerns and more time addressing real issues that improve the reliability and safety of our customers.

INNOVATION

Recent examples of our Symphony strategy driving innovation includes the successful deployment of grid-scale batteries near Warkworth. This has given us the planning flexibility to achieve a lower-cost installation of ducts for future network expansion by leveraging major roading work by the New Zealand Transport Agency Waka Kotahi. Another, is the use of those same batteries during a grid emergency to reduce peak demand at the nearby grid exit point, helping avoid localised power outages.

We commend the Commerce Commission for expanding the opportunities for innovation funding under the next price path, and we look forward to further embracing new ideas and solutions for our customers.

RESILIENCE

All climate change scenarios from the Intergovernmental Panel on Climate Change (IPCC) highlight an increase of extreme weather events for the Auckland Region. We have been engaging climate science agencies, such as NIWA, the University of Auckland, and Climsystems to better understand the physical impacts in the Auckland Region. We are also engaging with our customers and communities to understand their expectations regarding resilience and their willingness to pay for resilience solutions. The results from this work will help develop a resilience plan that is appropriate to the needs of Vector and its customers while seeking to strike a balance with affordability. We're doing this in the wider context of continued uncertainty around Government and local government objectives for infrastructure resilience and the cost burden of providing that resilience.

Our approach has been to focus on expenditure that is most cost-effective – in other words, those that mitigate the most risk with the lowest capital expenditure. This includes activities such as flood hardening around zone substations, strengthening electrical conductors, and network modernisation. We note, however, that we have avoided committing to high levels of capital expenditure where changes in government policy and regulation could materially reduce that cost – such as the impact of tree regulation reform as highlighted in the table below. We will re-engage with the Commerce Commission as these uncertainties are resolved, and re-openers are required.

We're following the work by the New Zealand Infrastructure Commission Te Waihanga to make critical infrastructure more resilient. This is an area of increasing importance to our customers just two years after the Auckland Anniversary weekend flooding and Cyclone Gabrielle, and we're looking forward to understanding Government resilience objectives when these are identified.

POTENTIAL FOR REOPENERS IN THE REVENUE PATH:

In our full 2024 AMP, we identified several areas where further investment is available to secure additional customer benefits, beyond what we included in our expenditure forecasts. Where those investments haven't been included, we set out what would need to change for them to be introduced, and that the mechanism for doing so would be by application to the Commerce Commission under a reopener process. For this AMP update we confirm these investment options remain available, and so we include details here.

OMITTED INVESTMENT AND UNREALISED CUSTOMER BENEFIT	WHY WE'RE NOT COMMITTING TO THIS INVESTMENT	WHAT NEEDS TO CHANGE FOR US TO COMMIT TO THIS INVESTMENT
Tree management (Without tree regulation reform) $196 million capex in RY26-30	This investment is significant for customers, and so we are bound to ensure it represents value for money. Reformed tree regulations would provide the opportunity to achieve similar outcomes for $59 million. That would be an opex cost.	1. If new network risk and investment modelling demonstrates that the capex investment is required, we would consider applying for an unforeseen project reopener. 2. If the tree regulations were to change to enable an opex solution, we would consider applying for a change event reopener.
Network meshing (In addition to existing strategy) $106 million capex in RY26-30	Uncertainty surrounding the Government's infrastructure resilience strategy and funding options.	Clarification of the Government's infrastructure resilience strategy and funding strategy is required. Based on the outcome we would consider applying for a change event reopener.
Electric vehicle uptake (impact on system growth forecast) $43 million capex in RY26-30	While the removal of financial incentives, together with poor economic conditions, indicates a slower rate of uptake may persist over the next few years, overall, the impact on system growth driven by EV uptake remains changeable and uncertain in the near term.	If the observed uptake of electric vehicles were to substantially exceed our forecast, we would consider applying for an unforeseen project reopener. Note - Policy development around smart home EV charging (as already adopted in the UK) could provide greater confidence in the potential for smart and scheduled management of EV load to reduce the impact of EV charging during network peak (i.e. orchestration) and optimise network reinforcement investment.

2 – What is in this AMP?

This Asset Management Plan (AMP) update sets out, as at the date of certification, our view of the investments we believe will deliver the best outcomes for our customers, and which also represent a prudent investment strategy. We note that, particularly given the uncertainty over future electricity demand, we are not bound to follow the investments described here as we update our plans and analysis on how to best deliver for our customers. Each investment we make goes through appropriate governance processes to ensure it is delivering against our strategy.

2.1 AMP update

In March 2024, we published a comprehensive AMP, which is available on our website www.vector.co.nz. This 2025 AMP update is structured to meet disclosure requirements. We have not attempted to duplicate the detailed explanations provided in our previously published, comprehensive AMP and we would encourage readers to revert to our 2024 AMP whenever a greater level of detail is required.

The 2025 AMP is limited to providing updates on material changes to our previous AMP including those relating to our network development and lifecycle asset management (maintenance and renewal) plans.

- Section 1 provides commentary on the increase in uncertainties we have observed since our last published AMP and sets out how we are responding to these uncertainties
- Section 2 sets out what is included in this year's AMP
- Section 3 presents an update of our capital and operational expenditure forecasts for the 10-year planning period (1 April 2025 to 31 March 2035). It also provides context for the material changes that have influenced our network development and lifecycle asset management plans since our last AMP disclosure
- Section 4 contains our updated Disclosed Schedules (11a-12d and 14a). It also contains our Directors' certification

2.2 AMP purpose statement

This AMP is intended to provide transparency to our customers, staff and stakeholders over the context in which we make investment decisions and how our asset management practices support the decision-making process.

2.3 AMP planning period

This AMP covers a 10-year planning period, from 1 April 2025 to 31 March 2035. Consistent with Information Disclosure requirements, a greater level of detail is provided for the first five years of this period.

2.4 Certification date

This AMP was certified and approved by our Board of Directors on 28 March 2025.

2.5 Overview of Vector

Vector is an innovative New Zealand energy company, which runs a portfolio of businesses delivering energy and communication services to 624,330[1] residential and commercial customers across New Zealand. Vector has a leading role in creating a new energy future through its Symphony strategy, which puts customers at the heart of the energy system. Vector is listed on the New Zealand Stock Exchange with ticker symbol VCT. Our majority shareholder, with voting rights of 75.1%, is Entrust. For further information, visit www.vector.co.nz.

2.6 Information disclosure requirements

Clause 2.6.3 in the Electricity Distribution Information Disclosure Determination 2024 (ID)[2] requires Vector to complete and publicly disclose, before 1 April 2025, an AMP update.

Clause 2.6.5 of the ID states that the AMP update must:

(i) Relate to the electricity distribution services supplied by the electricity distribution business (EDB);

(ii) Identify any material changes to the network development plans disclosed in the last AMP (or AMP update) per clause 11 and clauses 17.5 – 17.7 of Attachment A of the ID or in the last AMP update disclosed under this clause;

[1] Vector Annual Report 2024 https://blob-static.vector.co.nz/blob/vector/media/vector-2024/vec258-ar2024_book-print_full_v2.pdf

[2] https://comcom.govt.nz/__data/assets/pdf_file/0026/363365/Electricity-Distribution-Information-Disclosure-amendments-related-to-IM-Review-2023-Amendment-Determination-2024-red-lined-version-27-November-2024.pdf

(iii) Identify any material changes to the lifecycle asset management (maintenance and renewal) plans disclosed in the last AMP pursuant to clause 12 of Attachment A of the ID or in the last AMP update disclosed under this section;

(iv) Provide the reasons for any material changes to the previous disclosures in the Report on Forecast Capital Expenditure set out in Schedule 11a and Report on Forecast Operational Expenditure set out in Schedule 11b; and

(v) Identify any changes to the asset management practices of the EDB that would affect Schedule 13 Report on Asset Management Maturity disclosure

In addition, clause 2.6.6 requires each EDB to publicly disclose the following reports before the start of each disclosure year:

- Forecast Capital Expenditure in Schedule 11a
- Forecast Operational Expenditure in Schedule 11b
- Asset Condition in Schedule 12a
- Forecast Capacity in Schedule 12b
- Forecast Network Demand in Schedule 12c
- Forecast Interruptions and Duration in Schedule 12d

2.7 Asset management practices

Note as of 31 March 2025, there have been no material changes to the asset management practices and ongoing improvement plans that underpinned our 2024 AMP. Hence Schedule 13 - Report on Asset Management Maturity (AMMAT) as above remains unchanged and can be found in our 2024 AMP available on our website www.vector.co.nz.

A full updated AMMAT will be published as part of the 2026 AMP.

3 – Expenditure forecast and AMP major updates

3.1 Overview

This section sets out the expenditure forecasts for Vector's electricity distribution network assets over the next 10-year planning period (1 April 2025 to 31 March 2035) as relates to both our network development and lifecycle asset management plans.

- Section 3.2 outlines our total capex forecast
- Section 3.5 outlines our total opex forecast

This section also provides an update on any material changes since the 2024 AMP highlighting how our investment plan has evolved over the last 12 months to both grow and improve the network to meet Auckland's needs.

- Section 3.3 outlines the capex forecast variance to the 2024 AMP. Section 3.4 explains the major variances
- Section 3.6 outlines the opex forecast variance to the 2024 AMP. Section 3.7 explains the major variances

The capex and opex forecasts presented in this section align with Vector's planning process and financial year (FY) reporting period 1 July to 30 June. All figures presented are in 2025 dollars. The regulatory disclosure forecasts (see Appendices) are presented in regulatory year (RY) 1 April to 31 March, in both constant and nominal dollars, as per the Information Disclosure requirements. When comparing variance to the previous AMP in Sections 3.3 and 3.6, brackets represent negative numbers.

3.2 Capex forecast

The capex forecast update during the next 10-year planning period is presented below, based on our key asset management strategies, demand modelling and customer information available. The invest categories are grouped as follows:

- **Total capex –** aggregate investment forecast of all subcategories that follow
- **Growth capex** – forecast includes customer connection, system growth and relocations
- **Integrity capex** – forecast includes asset replacement and renewal, and reliability, safety and environment
- **Non-network capex** – forecast includes digital investment and property and leases

3.2.1 TOTAL CAPEX

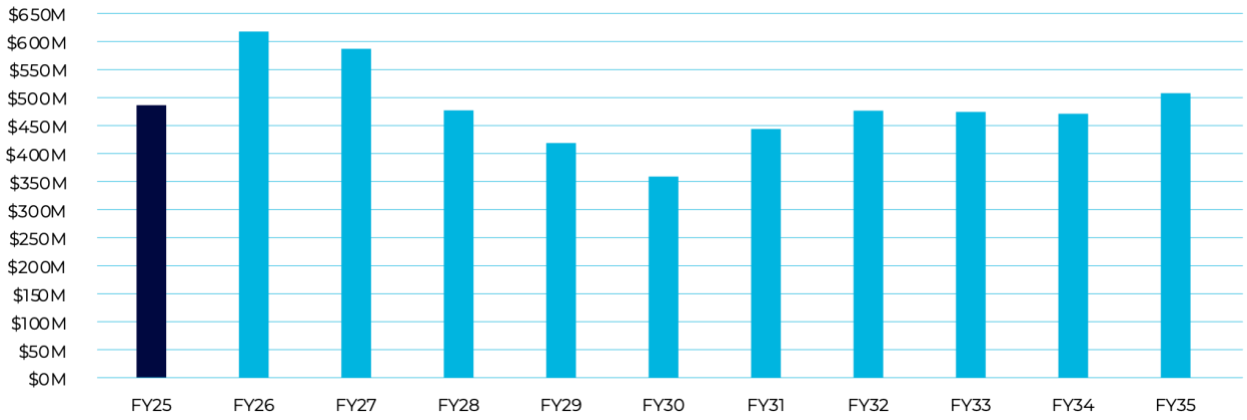


FIGURE 3-1: TOTAL CAPEX (FINANCIAL YEAR, $'000 CONSTANT FY25)

Total capex averages $482m p.a. with the expenditure profile reflecting the growth and integrity forecast (see detail in the following sections), for which there is more certainty in the short term. The higher gross expenditure in FY26 to FY27 is driven by large customer projects and associated system reinforcement requirements, as well as a large number of primary asset replacement projects planned during this period.

3.2.2 GROWTH CAPEX

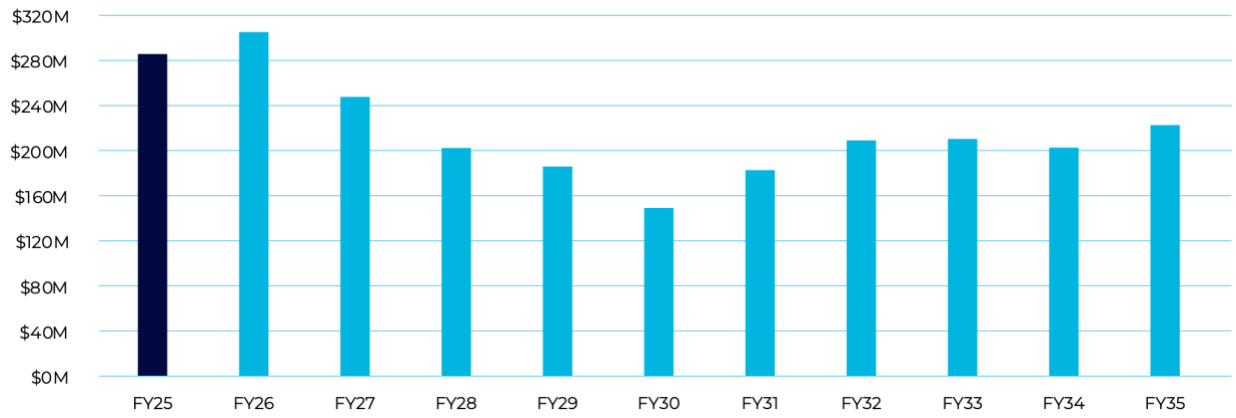


FIGURE 3-2: GROWTH CAPEX (FINANCIAL YEAR, $'000 CONSTANT FY25)

The expenditure profile for growth capex is influenced by the timing of significant projects with large capital outlay. The higher spend in FY26 and FY27 reflects continual investment to reinforce the backbone of the network to accommodate customer projects in data centres, transport electrification and Auckland airport. Key reinforcement projects during this period include two new zone substations, five zone substation upgrades, eleven cable upgrades as well as provision for two land purchases. The expenditure level from FY28 onwards averages circa $191m, largely in line with an average of $187m p.a. in the previous AMP. A higher investment in network capacity to meet anticipated point load demand in this period is offset by a reduction in the forecast for residential connections.

3.2.3 INTEGRITY CAPEX

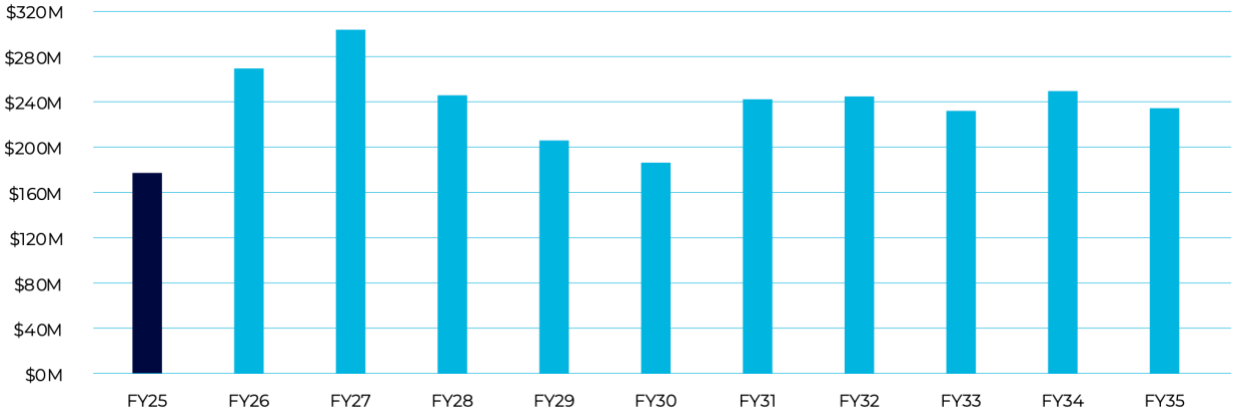


FIGURE 3-3: INTEGRITY CAPEX (FINANCIAL YEAR, $'000 CONSTANT FY25)

The asset integrity expenditure is higher in FY26 and FY27 driven by a higher investment in primary assets including 7 switchgear replacement (2 outdoor-to-indoor conversion (ODID)), 13 transformer replacements, cabling and ducts relating to Southdown GXP and a new provision to install RMU fibreglass enclosures. Integrity expenditure from FY28 onwards averages circa $230m p.a. and is higher than the previous AMP ($208m), largely driven by increased investment in primary assets from FY31 onwards based on updated risk-based asset modelling.

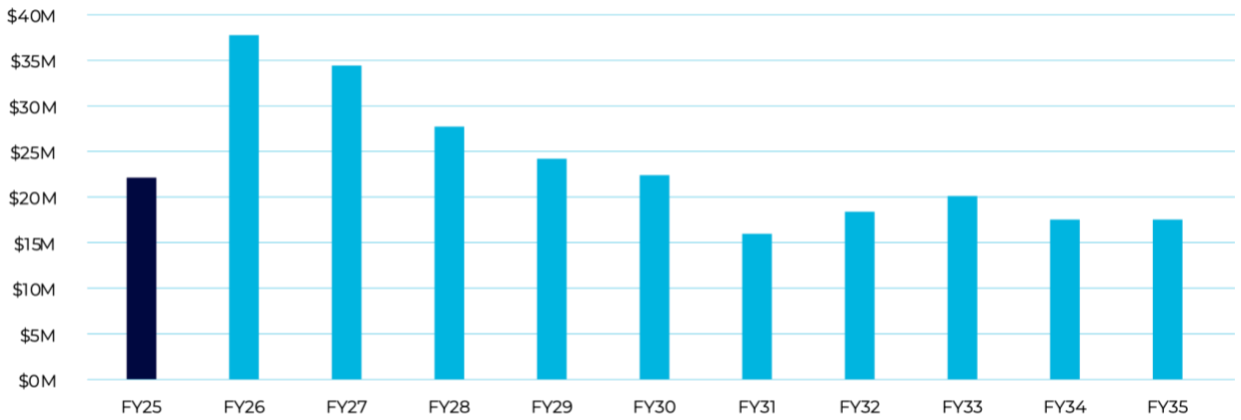


FIGURE 3-4: NON-NETWORK DIGITAL CAPEX (FINANCIAL YEAR, $'000 CONSTANT FY25)

3.2.4 NON-NETWORK DIGITAL CAPEX

Our investment in non-network digital capex is aligned with our Symphony strategy and provides us with the foundational digital infrastructure and platforms to deliver cost-efficiency, reliability and customer outcomes. Vector's Enterprise Resource Planning (ERP) Modernisation Programme has now come to the fore, with discovery having been carried out in FY25 and design and delivery set to commence and continue throughout FY26 and FY27. This manifests in heightened expenditure over these initial years. The expenditure profile also aligns with network technology initiatives including Advanced Distribution Management System (ADMS) Phase II implementation, cyber and platform lifecycle management initiatives including ERP and Customer Relationship Management (CRM) reviews and/or upgrades.

3.2.5 NON-NETWORK PROPERTY AND LEASES

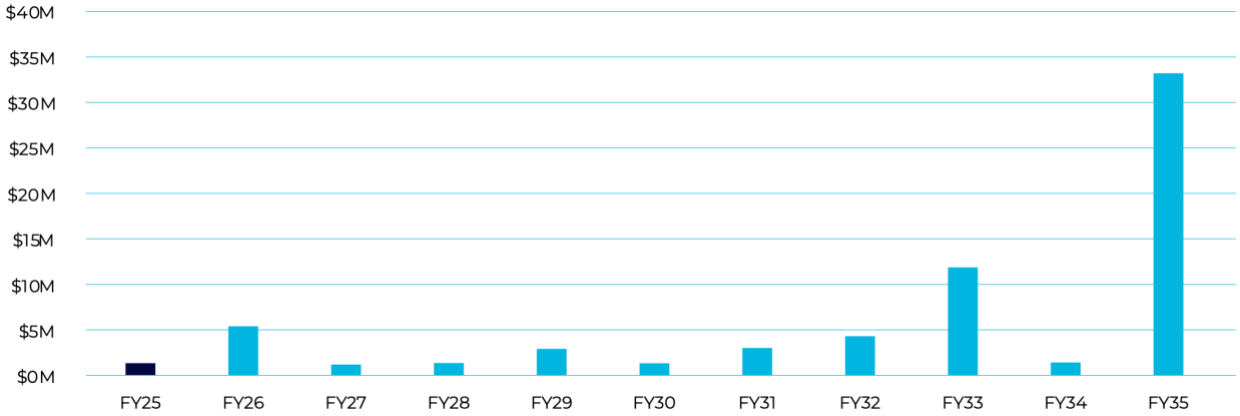


FIGURE 3-5: NON-NETWORK PROPERTY AND LEASES (FINANCIAL YEAR, $'000 CONSTANT FY25)

Spend in the property and leases category relates to the timing of renewal of leases for the stock holding warehouse (FY33) and 110 Carlton Gore Road premises (FY35).

3.3 2025 AMP capex variance to 2024 AMP

The 2025 AMP investment forecast for each category is summarised in table 3.1. A comparison to the previous AMP in terms of total capex is shown in figure 3.6. In the beginning of the 10-year AMP period, the AMP2025 expenditure is higher due to an increase in large point loads, while in the second half of the AMP period investment profile is pushed backward due to slower update of transport electrification.

The variance to the previous AMP by subcategory is summarised in table 3.2. The following subsections describe the differences for each subcategory.

KEY CAPEX CATEGORIES	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35	TOTAL (FY26-35)
Consumer Connection	129,753	116,292	99,504	85,707	74,736	72,363	72,658	72,658	72,658	69,341	**865,669**
System growth	138,617	95,486	67,434	65,475	40,286	76,875	102,950	104,215	96,484	119,815	**907,637**
Asset relocations	36,147	35,318	34,879	34,245	33,611	32,977	32,977	32,977	32,977	32,977	**339,083**
Asset replacement and renewal	174,696	221,292	187,445	151,040	132,615	182,808	185,335	175,883	188,312	117,840	**1,777,266**
Reliability, safety and environment	94,206	81,803	57,800	54,362	53,222	58,914	58,890	55,616	60,666	56,016	**631,496**
Non-network assets	43,028	35,504	28,985	27,014	23,645	18,903	22,621	31,886	18,865	50,616	**301,068**
Total CAPEX	**616,447**	**585,695**	**476,046**	**417,842**	**358,115**	**442,840**	**475,432**	**473,235**	**469,962**	**506,605**	**4,822,219**

TABLE 3-1: AMP 2025 CAPEX FORECAST (FINANCIAL YEAR, $'000 CONSTANT FY25)

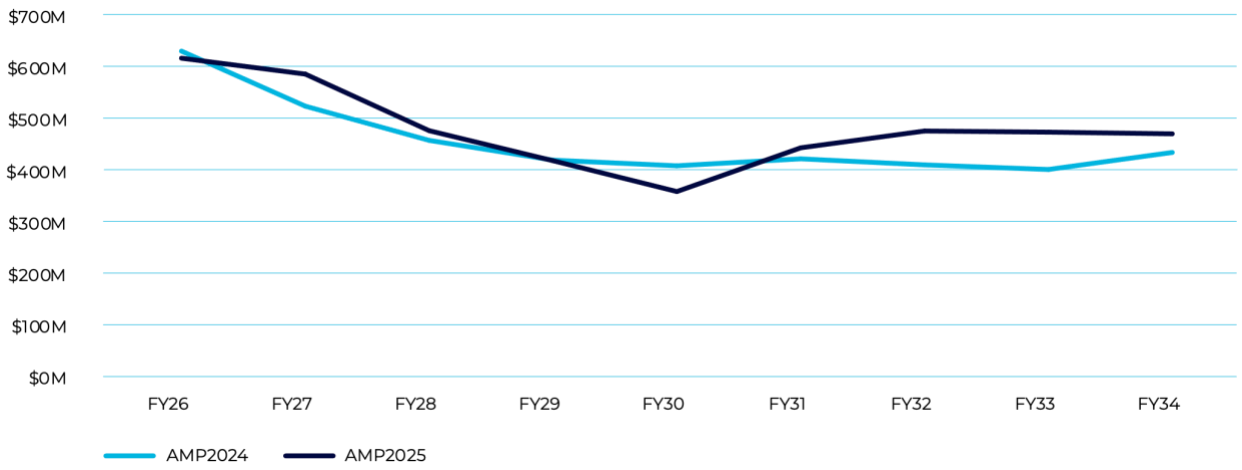


FIGURE 3-6: AMP 2025 VARIANCE TO AMP 2024 CAPEX FORECAST (FINANCIAL YEAR, $M CONSTANT FY25)

KEY CAPEX CATEGORIES	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	TOTAL (FY26-34)
Consumer Connection	(15,092)	4,181	5,719	(5,913)	(16,913)	(12,094)	(11,912)	(11,912)	(11,912)	(75,849)
System growth	33,702	15,529	(13,015)	(7,594)	(24,367)	29,676	49,178	42,983	20,349	146,442
Asset relocations	(2,301)	1,198	839	249	(224)	(807)	(807)	(807)	(807)	(3,466)
Asset replacement and renewal	(34,220)	17,470	25,075	5,796	(9,520)	9,747	32,240	34,308	48,215	129,111
Reliability, safety and environment	10,741	22,483	(5,325)	(163)	(742)	1,292	2,109	(98)	6,096	36,394
Non-network assets	(6,553)	1,263	5,514	6,477	1,839	(6,477)	(5,198)	7,877	(25,856)	(21,114)
Total CAPEX	**(13,722)**	**62,124**	**18,807**	**(1,148)**	**(49,928)**	**21,338**	**65,610**	**72,351**	**36,085**	**211,518**

TABLE 3-2: AMP 2025 VARIANCE TO AMP 2024 CAPEX FORECAST TABLE (FINANCIAL YEAR, $'000 CONSTANT FY25)

3.4 Explanation of major network capex variances

Key changes in capex over the 9 years for which the 2024 AMP and 2025 AMP overlap are as follows:

3.4.1 CUSTOMER CONNECTIONS

Since our last AMP, the prolonged economic recovery in New Zealand has led to a reduction in our housing and subdivisions investment forecasts ($76M).

3.4.2 SYSTEM GROWTH

System growth forecast has increased by $146m mostly due to projects that are brought forward to align with the timing of customer-driven projects ($90m) and other Vector initiatives ($45m) following a "dig once" approach to capture cost synergy and reduce public disruptions.

The key projects driving the variances are:

- Driven by the strong load growth in the CBD area as a result of data centre customer development, we have decided to establish a new CBD zone substation which will enable the long-term development of the CBD. The zone substation and related subtransmission cabling is forecast to require an investment of nearly $40m in the 10-year AMP period.
- We're evaluating plans for a new GXP in Huapai to accommodate the strong population and housing development in the area. To enable this in a cost-efficient way, we plan to leverage customer developments happening in the area and have brought forward just over $20m investment in subtransmission assets, under our 'dig once' approach.
- Due to commercial developments, we have forecast an investment at the end of the 10-year AMP period to develop the Newmarket zone substation ($23m).
- We've brought forward an investment of $13m to upgrade transformers T1 and T2 in the Takanini zone substations, also installing a third transformer to accommodate customer demand growth in the area.
- The Big Omaha zone substation 11kV network is located in a geographically and electrically isolated part of the network, which is also forecast to experience constraints whilst under contingency over coming years. The contingencies are also subject to complex operational decisions with limited options available to remediate, leading to a poor customer experience. The Omaha Peninsula 11kV Feeder Reinforcement ($17m) project which consists of a new feeder and backstop connection have been created to improve resilience for customers, and support future growth.

3.4.3 ASSET RELOCATION

The timing of asset relocation projects is dictated by large third-party projects. The expenditure forecast aligns with the previous AMP, with the updated long-term forecast based on historical expenditure resulting in a small reduction in forecast over the 9-year period (-$3.5m).

3.4.4 ASSET REPLACEMENT AND RELIABILITY

Asset replacement expenditure has increased by $129m compared to last year's AMP largely driven by an increase in investment in primary assets including zone substation switchgear ($51m), transformers ($18m), cable replacement ($38m) that are provisioned based on updated asset risk modelling.

The key projects driving the variances are:

POWER TRANSFORMERS AND SUBTRANSMISSION SWITCHGEAR

Recent data from routine inspection and testing of power transformers have shown that for asset health reasons, six additional transformer replacement projects are required within the AMP period.

We have also increased our investment forecast in subtransmission switchgear. Most notably, this will deliver a switchboard upgrade in our Quay Street zone substation in the CBD in the next five years, as well as replacements of nine oil type switchgear, and four outdoor-to-indoor conversions in the second half of the AMP period. The change was driven by a re-calibration of our CBARM models.

Another important resilience investment variance is the extension works in our Belmont zone substations, which will improve resilience in the area as the flood-prone neighbouring zone substation in Ngataringa Bay can be decommissioned. This project was previously motivated by growth but has since been reclassified as asset resilience.

CABLES/OVERHEAD

We've maintained our plans to install an additional subsea cable to Waiheke but have re-classified it as a network resilience investment. This recognises that lower forecast demand growth no longer requires asset reinforcement, however we consider the loss of the cable as a high-impact low-probability event given the criticality of secure supply for Waiheke customers and businesses. In light of the long lead time to commission a new undersea cable and that demand growth can change rapidly, it is prudent to begin this process to support growth were forecasts to change.

DISTRIBUTION EQUIPMENT

Two targeted programmes have been set up to mitigate a newly identified risk within our fleet of RMUs. . The programme will eliminate this risk and required an additional investment of nearly $14m to be added to our forecast.

3.4.5 RELIABILITY

Forecast investment in reliability, safety and environment has increased primarily due to the investment required to diversify Vector zone substation demand away from Penrose GXP, one of the largest GXPs in New Zealand. We have committed to strengthening the security of supply for parts of southern Auckland by establishing a new GXP in Southdown. This requires new duct and cable installations to our Te Papapa and Westfield ZSSs, as well new future-proofing ducts around the GXP site which are now included in this AMP update ($37m).

3.4.6 NON-NETWORK

DIGITAL

Our non-network capex has increased by $10m as we have refined the design of our ERP platform, which will be the core engine powering our asset and financial data processes.

PROPERTY AND LEASES

Property and leasing costs have reduced by $30m due to changes identified in the 53ZD process for how CPI is treated. Primarily this impacted the recognition of the warehouse & 110 CGR Office lease. There was also a slight timing and value change for the warehouse (FY34 to FY33).

3.5 Opex forecast

The forecast opex update during the next 10-year planning period is presented below, based on our key asset management strategies and operational structure. These are grouped in the following categories:

- **Total opex** – aggregate investment of all subcategories that follow
- **Network opex** - forecast includes service interruptions and emergencies, vegetation management, routine and corrective maintenance and inspection, asset replacement and renewal
- **Non-network opex** – forecast includes system operations and network support, business support

3.5.1 TOTAL OPEX

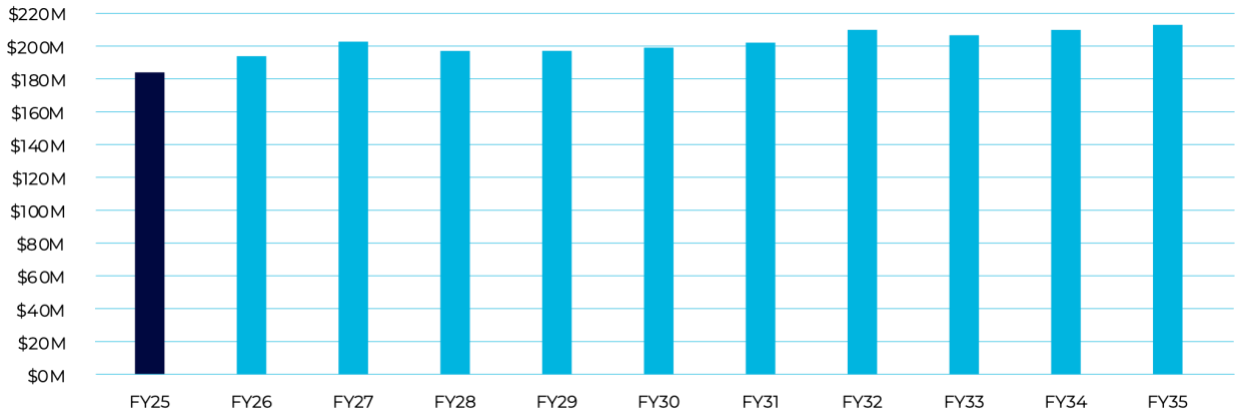


FIGURE 3-7: TOTAL OPEX **(FINANCIAL YEAR, $'000 CONSTANT FY25)**

KEY OPEX CATEGORIES	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35	TOTAL (FY26-35)
Service interruptions and emergencies	18,870	26,507	19,146	19,286	19,427	19,570	27,214	19,859	20,006	20,154	**210,041**
Vegetation management	8,000	9,000	9,000	7,500	6,500	6,000	5,000	5,000	5,000	5,000	**66,000**
Routine and corrective maintenance and inspection	27,382	27,066	28,328	27,651	26,904	28,108	26,389	27,868	27,483	27,536	**274,715**
Asset Replacement and renewal	19,546	19,021	17,060	17,144	17,229	17,314	17,400	17,486	17,573	17,660	**177,433**
System operations and network support	48,966	48,790	49,954	50,666	52,824	53,582	54,961	56,038	57,946	59,202	**532,931**
Business support	70,669	71,887	73,136	74,419	75,739	77,096	78,492	79,930	81,413	82,942	**765,722**
Total OPEX	**193,433**	**202,272**	**196,624**	**196,666**	**198,623**	**201,670**	**209,457**	**206,182**	**209,421**	**212,495**	**2,026,843**

TABLE 3-3: AMP 2025 OPEX FORECAST (FINANCIAL YEAR, $'000 CONSTANT FY25)

3.6 2025 AMP opex variance to 2024 AMP

Figure 3-8 shows the difference between the 2025 and 2024 AMP expenditure forecasts year on year, with Table 3-4 breaking down the variance by expenditure categories.

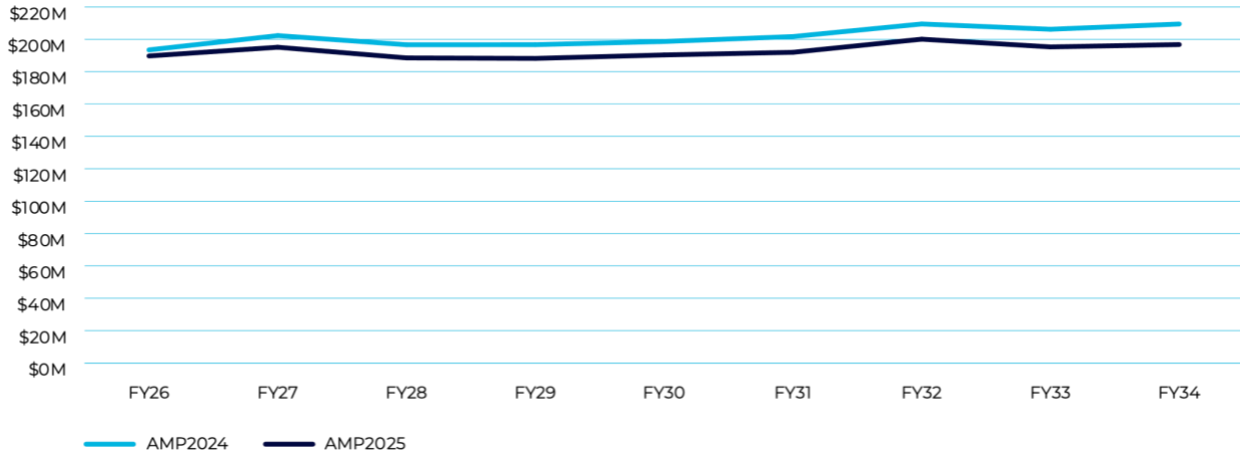


FIGURE 3-8: AMP 2025 VARIANCE TO AMP2024 OPEX FORECAST (FINANCIAL YEAR, $M CONSTANT FY25)

KEY OPEX CATEGORIES	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	TOTAL (FY26-34)
Service Interruptions and emergencies	(1,153)	(892)	(1,162)	(1,167)	(1,171)	(1,176)	(916)	(1,186)	(1,190)	**(10,013)**
Vegetation management	(752)	(1,752)	(1,752)	(1,288)	(288)	212	1,212	1,212	1,212	**(1,984)**
Routine and corrective maintenance and inspection	(1,268)	(1,041)	(1,987)	(1,441)	(693)	(1,263)	(864)	(750)	(1,169)	**(10,476)**
Asset Replacement and renewal	(2,179)	(4,761)	(3,234)	(3,211)	(3,187)	(3,162)	(3,137)	(3,112)	(3,087)	**(29,070)**
System operations and network support	11,967	12,652	12,389	12,130	11,715	11,450	11,182	10,924	10,671	**105,081**
Business support	(10,358)	(11,395)	(12,402)	(13,506)	(14,690)	(15,781)	(16,885)	(18,003)	(19,133)	**(132,153)**
Total OPEX	**(3,745)**	**(7,190)**	**(8,149)**	**(8,482)**	**(8,314)**	**(9,720)**	**(9,408)**	**(10,914)**	**(12,696)**	**(78,616)**

TABLE 3-4: AMP 2025 VARIANCE TO AMP 2024 OPEX FORECAST (FINANCIAL YEAR, $'000 CONSTANT FY25)

3.7 Explanation of major opex variances

Key changes in network opex over the 9 years for which the 2024 AMP and 2025 AMP overlap are as follows:

NETWORK OPEX

Service Interruptions and emergencies are $10.0m higher due to higher increase in Field Service Provider (FSP) commercial rates, the rate of inflation, as well as a small increase in relation to reactive work due to weather-related events not captured as part of exceptional reactive maintenance.

An increase of $10.5m in routine and corrective maintenance primarily driven by higher increase in FSP commercial rates, and the rate of inflation.

Asset replacement and renewal is $29.1m higher primarily due to continuation of line clearance work beyond FY26.

NON-NETWORK OPEX

Systems operations and network support expenditure is forecasted to be $105.1m lower due to reclassification of personnel costs and cyber security costs (now part of corporate costs) to business support and lower level of value added activity.

Business support costs have increased by $132.2m due to reclassification from system operations and network support (as above) as well as higher expected growth rate.

Investment in critical areas like cyber security, smart meter data, insurance due to climate events, and customer engagement have been maintained or increased. The importance of these critical investments was recognised by the Commerce Commission in their DPP4 Determination for “step up” allowances.

4 – Appendices

4.1 Appendix 1 - Forecast capital expenditure (Schedule 11a)

Company Name	Vector Limited
AMP Planning Period	1 April 2025 – 31 March 2035

SCHEDULE 11a: REPORT ON FORECAST CAPITAL EXPENDITURE

This schedule requires a breakdown of forecast expenditure on assets for the current disclosure year and a 10 year planning period. The forecasts should be consistent with the supporting information set out in the AMP. The forecast is to be expressed in both constant price and nominal dollar terms. Also required is a forecast of the value of commissioned assets (i.e., the value of RAB additions)

EDBs must provide explanatory comment on the difference between constant price and nominal dollar forecasts of expenditure on assets in Schedule 14a (Mandatory Explanatory Notes). EDBs must express the information in this schedule (11a) as a specific value rather than ranges. Any supporting information about these values may be disclosed in Schedule 15 (Voluntary Explanatory Notes).

This information is not part of audited disclosure information.

sch ref			Current Year CY	CY+1	CY+2	CY+3	CY+4	CY+5	CY+6	CY+7	CY+8	CY+9	CY+10
8			31 Mar 25	31 Mar 26	31 Mar 27	31 Mar 28	31 Mar 29	31 Mar 30	31 Mar 31	31 Mar 32	31 Mar 33	31 Mar 34	31 Mar 35
9		**11a(i): Expenditure on Assets Forecast**	**$000 (in nominal dollars)**										
10		Consumer connection	147,394	141,292	124,700	111,000	98,007	87,484	84,648	86,588	89,117	91,626	90,980
11		System growth	96,405	132,324	108,672	78,193	71,153	51,612	77,108	112,879	125,045	121,782	145,016
12		Asset replacement and renewal	167,667	162,337	219,593	210,765	176,935	155,734	198,553	221,462	219,739	234,746	235,172
13		Asset relocations	23,824	33,264	36,946	37,374	37,740	38,051	38,366	39,259	40,364	41,501	42,670
14		Reliability, safety and environment:											
15		Quality of supply	-	-	-	-	-	-	-	-	-	-	-
16		Legislative and regulatory	2,941	205	-	-	-	-	-	-	-	-	-
17		Other reliability, safety and environment	17,073	75,664	86,905	67,074	59,621	59,339	65,515	69,006	67,984	73,576	72,815
18		**Total reliability, safety and environment**	20,014	75,869	86,905	67,074	59,621	59,339	65,515	69,006	67,984	73,576	72,815
19		**Expenditure on network assets**	455,304	545,086	576,816	504,406	443,456	392,220	464,190	529,194	542,249	563,231	586,653
20		**Expenditure on non-network assets**	24,917	37,966	38,553	32,427	29,921	27,360	23,065	25,606	35,890	27,604	54,757
21		**Expenditure on assets**	480,221	583,052	615,369	536,833	473,377	419,580	487,255	554,800	578,139	590,835	641,410
22													
23	*plus*	Cost of financing	9,030	12,535	12,495	10,316	9,218	8,093	9,471	11,175	11,871	11,942	13,445
24	*less*	Value of capital contributions	212,936	241,846	236,605	226,860	219,229	216,730	215,835	216,684	219,605	221,898	220,907
25	*plus*	Value of vested assets											
26													
27		**Capital expenditure forecast**	276,315	353,741	391,259	320,289	263,366	210,943	280,891	349,291	370,405	380,879	433,948
28													
29		Assets commissioned	270,689	353,740	391,259	320,290	263,369	210,943	280,891	349,292	370,404	380,879	433,944
30			31 Mar 25	31 Mar 26	31 Mar 27	31 Mar 28	31 Mar 29	31 Mar 30	31 Mar 31	31 Mar 32	31 Mar 33	31 Mar 34	31 Mar 35
31													
32			**$000 (in constant prices)**										
33		Consumer connection	147,394	137,233	117,852	102,136	87,811	76,310	71,856	71,489	71,562	71,562	69,111
34		System growth	96,405	128,523	102,704	71,949	63,751	45,020	65,455	93,196	100,413	95,114	110,158
35		Asset replacement and renewal	167,667	157,673	207,534	193,935	158,529	135,842	168,547	182,845	176,453	183,341	178,643
36		Asset relocations	23,824	32,308	34,917	34,390	33,814	33,191	32,568	32,413	32,413	32,413	32,413
37		Reliability, safety and environment:											
38		Quality of supply	-	-	-	-	-	-	-	-	-	-	-
39		Legislative and regulatory	2,941	199	-	-	-	-	-	-	-	-	-
40		Other reliability, safety and environment	17,073	73,490	82,132	61,718	53,419	51,760	55,614	56,973	54,592	57,464	55,312
41		**Total reliability, safety and environment**	20,014	73,689	82,132	61,718	53,419	51,760	55,614	56,973	54,592	57,464	55,312
42		**Expenditure on network assets**	455,304	529,426	545,139	464,128	397,324	342,123	394,040	436,916	435,433	439,894	445,637
43		Expenditure on non-network assets	24,917	36,875	36,436	29,838	26,808	23,865	19,579	21,141	28,820	21,559	41,595
44		**Expenditure on assets**	480,221	566,301	581,575	493,966	424,132	365,988	413,619	458,057	464,253	461,453	487,232
45													
46		**Subcomponents of expenditure on assets (where known)**											
48		Energy efficiency and demand side management, reduction of energy losses											
49		Overhead to underground conversion	8,281	11,656	12,323	12,323	12,323	12,323	12,323	12,323	12,323	12,323	12,323
50		Research and development	-	-	-	-	-	-	-	-	-	-	-
52													

	31 Mar 25	31 Mar 26	31 Mar 27	31 Mar 28	31 Mar 29	31 Mar 30	31 Mar 31	31 Mar 32	31 Mar 33	31 Mar 34	31 Mar 35
Difference between nominal and constant price forecasts	$000										
Consumer connection	-	4,059	6,848	8,864	10,196	11,174	12,792	15,099	17,555	20,064	21,869
System growth	-	3,801	5,968	6,244	7,402	6,592	11,653	19,683	24,632	26,668	34,858
Asset replacement and renewal	-	4,664	12,059	16,830	18,406	19,892	30,006	38,617	43,286	51,405	56,529
Asset relocations	-	956	2,029	2,984	3,926	4,860	5,798	6,846	7,951	9,088	10,257
Reliability, safety and environment:											
Quality of supply	-	-	-	-	-	-	-	-	-	-	-
Legislative and regulatory	-	6	-	-	-	-	-	-	-	-	-
Other reliability, safety and environment	-	2,174	4,773	5,356	6,202	7,579	9,901	12,033	13,392	16,112	17,503
Total reliability, safety and environment	-	2,180	4,773	5,356	6,202	7,579	9,901	12,033	13,392	16,112	17,503
Expenditure on network assets	-	15,660	31,677	40,278	46,132	50,097	70,150	92,278	106,816	123,337	141,016
Expenditure on non-network assets	-	1,091	2,117	2,589	3,113	3,495	3,486	4,465	7,070	6,045	13,162
Expenditure on assets	-	16,751	33,794	42,867	49,245	53,592	73,636	96,743	113,886	129,382	154,178

Commentary on options and considerations made in the assessment of forecast expenditure

EDBs may provide explanatory comment on the options they have considered (including scenarios used) in assessing forecast expenditure on assets for the current disclosure year and a 10 year planning period in Schedule 15

	31 Mar 25	31 Mar 26	31 Mar 27	31 Mar 28	31 Mar 29	31 Mar 30
11a(ii): Consumer Connection						
*Consumer types defined by EDB**	$000 (in constant prices)					
Service Connection	28,784	27,934	25,562	27,382	27,585	24,101
Customer Substations	58,933	68,473	57,922	37,941	23,030	19,569
Business subdivisions	4,597	1,811	1,012	1,012	1,012	1,012
Residential Subdivisions	48,210	33,870	29,442	31,887	32,270	27,714
Capacity Changes	5,461	3,966	2,933	2,933	2,933	2,933
Street Lighting	1,407	1,179	981	981	981	981
Easements	2	-	-	-	-	-
*include additional rows if needed						
Consumer connection expenditure	147,394	137,233	117,852	102,136	87,811	76,310
less Capital contributions funding consumer connection	144,683	137,934	119,657	103,701	89,156	77,478
Consumer connection less capital contributions	2,711	(701)	(1,805)	(1,565)	(1,345)	(1,168)
11a(iii): System Growth						
Subtransmission	14,027	16,671	11,743	8,305	8,744	2,266
Zone substations	32,676	57,996	44,288	29,509	21,460	12,901
Distribution and LV lines	1,464	343	-	-	-	-
Distribution and LV cables	47,220	53,372	46,673	34,135	33,547	29,853
Distribution substations and transformers	434	-	-	-	-	-
Distribution switchgear	2	-	-	-	-	-
Other network assets	582	141	-	-	-	-
System growth expenditure	96,405	128,523	102,704	71,949	63,751	45,020
less Capital contributions funding system growth	52,493	77,004	83,620	85,631	88,723	94,982
System growth less capital contributions	43,912	51,519	19,084	(13,682)	(24,972)	(49,962)

	31 Mar 25	31 Mar 26	31 Mar 27	31 Mar 28	31 Mar 29	31 Mar 30

11a(iv): Asset Replacement and Renewal

	$000 (in constant prices)					
Subtransmission	2,202	18,109	32,779	22,486	8,769	7,039
Zone substations	23,447	35,833	68,726	73,991	54,958	33,842
Distribution and LV lines	26,599	13,772	14,417	13,624	13,322	13,337
Distribution and LV cables	64,499	49,025	50,370	46,933	45,969	46,142
Distribution substations and transformers	14,924	8,621	8,624	7,957	7,765	7,774
Distribution switchgear	23,155	22,942	22,952	21,970	21,731	21,743
Other network assets	12,841	9,371	9,666	6,974	6,015	5,965
Asset replacement and renewal expenditure	167,667	157,673	207,534	193,935	158,529	135,842
less Capital contributions funding asset replacement and renewal						
Asset replacement and renewal less capital contributions	167,667	157,673	207,534	193,935	158,529	135,842

	31 Mar 25	31 Mar 26	31 Mar 27	31 Mar 28	31 Mar 29	31 Mar 30

11a(v): Asset Relocations

*Project or programme**	$000 (in constant prices)					
Overground to underground conversions	8,281	11,656	12,323	12,323	12,323	12,323

**include additional rows if needed*

All other project or programmes - asset relocations	15,543	20,652	22,594	22,067	21,491	20,868
Asset relocations expenditure	23,824	32,308	34,917	34,390	33,814	33,191
less Capital contributions funding asset relocations	15,761	19,960	20,334	19,413	18,543	16,587
Asset relocations less capital contributions	8,063	12,348	14,583	14,977	15,271	16,604

	31 Mar 25	31 Mar 26	31 Mar 27	31 Mar 28	31 Mar 29	31 Mar 30

11a(vi): Quality of Supply

*Project or programme**	$000 (in constant prices)					

**include additional rows if needed*

All other projects or programmes - quality of supply						
Quality of supply expenditure	-	-	-	-	-	-
less Capital contributions funding quality of supply						
Quality of supply less capital contributions	-	-	-	-	-	-

		31 Mar 25	31 Mar 26	31 Mar 27	31 Mar 28	31 Mar 29	31 Mar 30

11a(vii): Legislative and Regulatory

	Project or programme*	$000 (in constant prices)					
	*include additional rows if needed						
	All other projects or programmes - legislative and regulatory	2,941	199				
	Legislative and regulatory expenditure	2,941	199	-	-	-	-
less	Capital contributions funding legislative and regulatory						
	Legislative and regulatory less capital contributions	2,941	199	-	-	-	-

	31 Mar 25	31 Mar 26	31 Mar 27	31 Mar 28	31 Mar 29	31 Mar 30

11a(viii): Other Reliability, Safety and Environment

	Project or programme*	$000 (in constant prices)					
	*include additional rows if needed						
	All other projects or programmes - other reliability, safety and environment	17,073	73,490	82,132	61,718	53,419	51,760
	Other reliability, safety and environment expenditure	17,073	73,490	82,132	61,718	53,419	51,760
less	Capital contributions funding other reliability, safety and environment						
	Other reliability, safety and environment less capital contributions	17,073	73,490	82,132	61,718	53,419	51,760

	31 Mar 25	31 Mar 26	31 Mar 27	31 Mar 28	31 Mar 29	31 Mar 30

11a(ix): Non-Network Assets

Routine expenditure

	Project or programme*	$000 (in constant prices)					
	*include additional rows if needed						
	All other projects or programmes - routine expenditure	5,558	15,411	12,159	9,424	11,002	10,068
	Routine expenditure	5,558	15,411	12,159	9,424	11,002	10,068

Atypical expenditure

	Project or programme*						
	*include additional rows if needed						
	All other projects or programmes - atypical expenditure						
	Atypical expenditure	19,359	21,464	24,277	20,414	15,806	13,797
	Expenditure on non-network assets	24,917	36,875	36,436	29,838	26,808	23,865

												Company Name	Vector Limited
												AMP Planning Period	1 April 2025 – 31 March 2035

SCHEDULE 11b: REPORT ON FORECAST OPERATIONAL EXPENDITURE

This schedule requires a breakdown of forecast operational expenditure for the disclosure year and a 10 year planning period. The forecasts should be consistent with the supporting information set out in the AMP. The forecast is to be expressed in both constant price and nominal dollar terms.

sch ref			Current Year CY	CY+1	CY+2	CY+3	CY+4	CY+5	CY+6	CY+7	CY+8	CY+9	CY+10
8			31 Mar 25	31 Mar 26	31 Mar 27	31 Mar 28	31 Mar 29	31 Mar 30	31 Mar 31	31 Mar 32	31 Mar 33	31 Mar 34	31 Mar 35
9	**Operational Expenditure Forecast**		$000 (in nominal dollars)										
10	Service interruptions and emergencies		17,255	19,217	25,741	22,435	21,114	21,764	22,430	29,760	26,038	24,552	25,304
11	Vegetation management		8,953	7,807	9,149	9,637	8,629	7,571	7,030	6,162	6,009	6,147	6,289
12	Routine and corrective maintenance and inspection		23,586	27,546	28,366	30,001	30,508	30,400	31,933	31,494	33,053	33,906	34,619
13	Asset replacement and renewal		14,927	19,094	20,012	18,782	18,780	19,313	19,856	20,414	20,988	21,579	22,186
14	**Network Opex**		64,721	73,664	83,268	80,856	79,031	79,048	81,248	87,831	86,088	86,184	88,398
15	System operations and network support		49,056	49,330	51,033	53,183	55,376	58,689	61,308	64,162	67,025	70,665	74,076
16	Business support		70,348	71,830	74,812	77,983	81,272	84,637	88,136	91,798	95,631	99,645	103,852
17	Non-network solutions provided by a related party or third party	*Not Required before DY2025*											
18	**Non-network opex**		119,404	121,160	125,845	131,166	136,648	143,326	149,444	155,960	162,656	170,310	177,928
19	**Operational expenditure**		184,125	194,824	209,112	212,022	215,679	222,373	230,692	243,791	248,744	256,494	266,326
20			31 Mar 25	31 Mar 26	31 Mar 27	31 Mar 28	31 Mar 29	31 Mar 30	31 Mar 31	31 Mar 32	31 Mar 33	31 Mar 34	31 Mar 35
22			$000 (in constant prices)										
23	Service interruptions and emergencies		17,255	18,841	24,598	20,986	19,251	19,392	19,534	25,303	21,698	19,969	20,117
24	Vegetation management		8,953	7,647	8,750	9,000	7,875	6,750	6,125	5,250	5,000	5,000	5,000
25	Routine and corrective maintenance and inspection		23,586	27,001	27,145	28,012	27,820	27,091	27,807	26,819	27,498	27,579	27,523
26	Asset replacement and renewal		14,927	18,704	19,152	17,550	17,123	17,208	17,293	17,378	17,465	17,551	17,638
27	**Network Opex**		64,721	72,193	79,645	75,549	72,069	70,441	70,759	74,750	71,661	70,100	70,278
28	System operations and network support		49,056	48,354	48,834	49,663	50,488	52,284	53,393	54,617	55,769	57,469	58,888
29	Business support		70,348	70,421	71,583	72,824	74,098	75,409	76,756	78,143	79,571	81,042	82,560
30	Non-network solutions provided by a related party or third party	*Not Required before DY2025*											
31	**Non-network opex**		119,404	118,775	120,417	122,487	124,586	127,693	130,149	132,760	135,340	138,511	141,448
32	**Operational expenditure**		184,125	190,968	200,062	198,036	196,656	198,134	200,908	207,510	207,001	208,611	211,726
33	**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			5,419	5,988	6,599	7,337	8,160	9,079	10,106	11,254	12,537	13,972	15,575
41	** Direct billing expenditure by suppliers that direct bill the majority of their consumers*												
43			31 Mar 25	31 Mar 26	31 Mar 27	31 Mar 28	31 Mar 29	31 Mar 30	31 Mar 31	31 Mar 32	31 Mar 33	31 Mar 34	31 Mar 35
45	**Difference between nominal and real forecasts**		$000										
46	Service interruptions and emergencies		-	376	1,143	1,449	1,863	2,372	2,895	4,457	4,340	4,583	5,187
47	Vegetation management		-	159	399	637	754	821	905	912	1,009	1,147	1,289
48	Routine and corrective maintenance and inspection		-	546	1,221	1,988	2,688	3,309	4,126	4,675	5,555	6,326	7,096
49	Asset replacement and renewal		-	390	860	1,232	1,657	2,105	2,563	3,036	3,524	4,028	4,548
50	**Network Opex**		-	1,471	3,623	5,307	6,962	8,607	10,489	13,080	14,427	16,084	18,119
51	System operations and network support		-	976	2,198	3,520	4,887	6,404	7,915	9,546	11,256	13,196	15,188
52	Business support		-	1,409	3,229	5,159	7,174	9,228	11,380	13,655	16,060	18,603	21,292
53	Non-network solutions provided by a related party or third party	*Not Required before DY2025*	-	-	-	-	-	-	-	-	-	-	-
54	**Non-network opex**		-	2,385	5,428	8,679	12,061	15,633	19,295	23,200	27,316	31,799	36,480
55	**Operational expenditure**		-	3,856	9,050	13,986	19,023	24,240	29,784	36,281	41,743	47,883	54,600
57	**Commentary on options and considerations made in the assessment of forecast expenditure**												
58	*EDBs may provide explanatory comment on the options they have considered (including scenarios used) in assessing forecast operational expenditure for the current disclosure year and a 10 year planning period in Schedule 15.*												

Company Name	**Vector Limited**
AMP Planning Period	**1 April 2025 – 31 March 2035**

SCHEDULE 12a: REPORT ON ASSET CONDITION

This schedule requires a breakdown of asset condition by asset class as at the start of the forecast year. The data accuracy assessment relates to the percentage values disclosed in the asset condition columns. Also required is a forecast of the percentage of units to be replaced in the next 5 years. All information should be consistent with the information provided in the AMP and the expenditure on assets forecast in Schedule 11a. All units relating to cable and line assets, that are expressed in km, refer to circuit lengths.

sch ref					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
10	All	Overhead Line	Concrete poles / steel structure	No.	0.01%	0.09%	21.66%	31.24%	47.01%		4	6.47%
11	All	Overhead Line	Wood poles	No.	0.06%	0.99%	84.26%	8.23%	6.46%		4	37.22%
12	All	Overhead Line	Other pole types	No.	-	-	4.44%	6.91%	88.65%		4	-
13	HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km	-	0.03%	89.51%	7.63%	2.83%		3	0.27%
14	HV	Subtransmission Line	Subtransmission OH 110kV+ conductor	km	-	-	72.35%	25.70%	1.95%		3	-
15	HV	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km	-	2.94%	1.87%	37.22%	57.97%		2	3.24%
16	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km	-	-	-	97.51%	2.49%		2	2.74%
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	-	45.53%	34.15%	17.21%	3.11%		2	64.95%
19	HV	Subtransmission Cable	Subtransmission UG 110kV+ (XLPE)	km	-	-	-	85.70%	14.30%		2	-
20	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Oil pressurised)	km	-	-	61.69%	31.13%	7.17%		2	-
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	-	-	97.37%	2.63%	-		2	-
24	HV	Zone substation Buildings	Zone substations up to 66kV	No.	-	-	7.83%	68.70%	23.48%		4	5.22%
25	HV	Zone substation Buildings	Zone substations 110kV+	No.	-	-	-	33.33%	66.67%		4	-
26	HV	Zone substation switchgear	22/33kV CB (Indoor)	No.	-	5.90%	5.28%	24.53%	64.29%		3	5.90%
27	HV	Zone substation switchgear	22/33kV CB (Outdoor)	No.	-	21.70%	40.57%	27.36%	10.38%		3	26.42%
28	HV	Zone substation switchgear	33kV Switch (Ground Mounted)	No.							N/A	
29	HV	Zone substation switchgear	33kV Switch (Pole Mounted)	No.	-	27.63%	63.16%	7.24%	1.97%		3	33.55%
30	HV	Zone substation switchgear	33kV RMU	No.	-	16.67%	50.00%	-	33.33%		3	16.67%
31	HV	Zone substation switchgear	50/66/110kV CB (Indoor)	No.	-	-	-	40.91%	59.09%		3	-
32	HV	Zone substation switchgear	50/66/110kV CB (Outdoor)	No.	-	100.00%	-	-	-		3	100.00%
33	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.	-	8.83%	23.91%	19.93%	47.33%		3	13.67%
34	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (pole mounted)	No.							N/A	

					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
39	HV	Zone Substation Transformer	Zone Substation Transformers	No.	-	6.90%	43.97%	18.53%	30.60%		4	5.17%
40	HV	Distribution Line	Distribution OH Open Wire Conductor	km	-	0.76%	84.96%	11.44%	2.83%		3	1.22%
41	HV	Distribution Line	Distribution OH Aerial Cable Conductor	km							N/A	
42	HV	Distribution Line	SWER conductor	km							N/A	
43	HV	Distribution Cable	Distribution UG XLPE or PVC	km	0.37%	0.25%	1.97%	20.69%	76.72%		2	0.61%
44	HV	Distribution Cable	Distribution UG PILC	km	0.25%	1.16%	4.61%	77.26%	16.72%		2	1.42%
45	HV	Distribution Cable	Distribution Submarine Cable	km	-	-	86.16%	13.80%	0.04%		2	-
46	HV	Distribution switchgear	3.3/6.6/11/22kV CB (pole mounted) - reclosers and sectionalisers	No.	0.89%	-	1.18%	45.27%	52.66%		4	11.36%
47	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.	-	2.72%	8.42%	10.40%	78.47%		4	6.19%
48	HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.	1.25%	0.46%	43.89%	23.26%	31.13%		4	9.13%
49	HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.	4.56%	10.25%	63.55%	15.10%	6.53%		3	22.58%
50	HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.	3.10%	3.68%	35.94%	16.05%	41.24%		3	7.81%
51	HV	Distribution Transformer	Pole Mounted Transformer	No.	3.53%	8.47%	40.25%	24.85%	22.90%		3	9.64%
52	HV	Distribution Transformer	Ground Mounted Transformer	No.	5.63%	3.01%	31.40%	27.13%	32.83%		3	8.64%
53	HV	Distribution Transformer	Voltage regulators	No.	-	-	14.29%	38.10%	47.62%		4	-
54	HV	Distribution Substations	Ground Mounted Substation Housing	No.	2.04%	2.43%	74.67%	7.11%	13.75%		4	4.47%
55	LV	LV Line	LV OH Conductor	km	-	-	85.90%	7.66%	6.45%		3	2.33%
56	LV	LV Cable	LV UG Cable	km	0.48%	6.36%	20.06%	36.93%	36.17%		2	6.84%
57	LV	LV Streetlighting	LV OH/UG Streetlight circuit	km						100.00%	1	
58	LV	Connections	OH/UG consumer service connections	No.						100.00%	1	
59	All	Protection	Protection relays (electromechanical, solid state and numeric)	No.	-	0.22%	54.39%	23.37%	22.02%		3	0.22%
60	All	SCADA and communications	SCADA and communications equipment operating as a single system	Lot	-	1.79%	36.69%	38.48%	23.04%		4	1.79%
61	All	Capacitor Banks	Capacitors including controls	No.	-	-	85.96%	7.02%	7.02%		3	-
62	All	Load Control	Centralised plant	Lot	-	-	100.00%	-	-		4	-
63	All	Load Control	Relays	No.							N/A	
64	All	Civils	Cable Tunnels	km	-	-	8.62%	1.11%	90.27%		4	-

4.4 Appendix 4 - Forecast capacity (Schedule 12b)

Company Name	**Vector Limited**
AMP Planning Period	**1 April 2025 – 31 March 2035**

SCHEDULE 12b: REPORT ON FORECAST CAPACITY

This schedule requires a breakdown of current and forecast capacity and constraints for each zone substation. The data provided should be consistent with the information provided in the AMP. Information provided in this table should relate to the operation of the network in its normal steady state configuration.

sch ref

12b(i): System Growth - Zone Substations

		Required before	*Not Required before DY2025*	*Not Required before DY2025*	*before DY2025*	*before DY2025*	*Not Required before DY2025*	*Not Required before DY2025*	*Not Required before DY2025*	*Not Required before DY2025*	*Not Required before DY2025*	*Not Required before DY2025*	*Not Required before DY2025*	*Not Required before DY2025*	*Not Required before DY2025*	*Not Required before DY2025*	*Not Required before DY2025*	*Not Required before DY2025*	*Not Required before DY2025*	
8	*Existing Zone Substa*	**Current peak load period**	**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 cause**	**Constraint solution type**	**Constraint solution progress**	**Temporary constraint solution remaining lifespan**	**Explanation**
9	Atkinson Road	Winter	20	N-1	No constraint	22	Winter	21	N-1	Winter		19	N-1	No constraint	None					
10	Auckland Airport	Summer	25	N-1	No constraint	18	Summer	8	N-1 switched	Summer		4	N-1 switched	No constraint	None					
11	Avondale	Winter	20	N-1	No constraint	13	Winter	11	N-1	Winter		6	N-1 switched	No constraint	10+					Breach beyond the 10 years of the AMP
12	Bairds	Winter	20	N-1 switched	No constraint	11	Winter	8	N-1 switched	Winter		4	N-1 switched	No constraint	10+					Breach beyond the 10 years of the AMP
13	Balmain	Winter	13	N-1 switched	No constraint	4	Winter	2	N-1 switched	Winter		2	N-1 switched	No constraint	10+					Breach beyond the 10 years of the AMP
14	Balmoral	Winter	20	N-1	No constraint	21	Winter	19	N-1	Winter		19	N-1	No constraint	None					
15	Belmont	Winter	13	N-1	No constraint	13	Winter	10	N-1	Winter		9	N-1 switched	No constraint	None					
16	Big Omaha	Winter	15	N-1 switched	No constraint	5	Winter	5	N-1 switched	Winter		3	N-1 switched	Security	10+	Subtransmission circuit	Network upgrade	Solution confirmed		Additional 11kV backstop feeders + generation
17	Birkdale	Winter	20	N-1	No constraint	19	Winter	19	N-1	Winter		17	N-1	No constraint	None					
18	Brickworks	Winter	15	N-1 switched	No constraint	6	Winter	3	N-1 switched	Winter		1	N-1 switched	No constraint	10+					Breach beyond the 10 years of the AMP
19	Browns Bay	Winter	13	N-1	No constraint	10	Winter	9	N-1	Winter		7	N-1 switched	No constraint	None					
20	Bush Road	Winter	24	N-1	No constraint	25	Winter	23	N-1	Winter		20	N-1 switched	No constraint	None					
21	Carbine	Summer	20	N-1	No constraint	17	Summer	16	N-1	Winter		15	N-1	No constraint	None					
22	Chevalier	Winter	19	N-1	No constraint	14	Winter	11	N-1	Winter		5	N-1 switched	No constraint	10+					Breach beyond the 10 years of the AMP
23	Clendon	Winter	20	N-1	No constraint	18	Winter	18	N-1	Winter		18	N-1	No constraint	None					
24	Clevedon	Winter	5	N	Security		Winter	0	N	Winter		0	N	Security	0	Distribution back-up circuit capacity	Other non-traditional solution	No active planning	> 3 years	Currently using Counties backstop and KawakawaBay BESS
25	Coatesville	Winter	13	N-1	No constraint	22	Winter	22	N-1	Winter		22	N-1	No constraint	None					
26	Drive	Winter	20	N-1	No constraint	17	Winter	13	N-1	Winter		8	N-1 switched	No constraint	10+					Breach beyond the 10 years of the AMP
27	East Coast Road	Winter	24	N-1 switched	No constraint	10	Winter	9	N-1 switched	Winter		8	N-1 switched	No constraint	None					
28	East Tamaki	Winter	20	N-1 switched	No constraint	6	Winter	0	N	Winter		0	N	Security	4	Distribution back-up circuit capacity	Network upgrade	Planning stage		11kV projects to increase offload capacity
29	Flatbush	Winter	20	N-1	No constraint	15	Winter	14	N-1	Winter		13	N-1	No constraint	None					
30	Forrest Hill	Winter	13	N-1	No constraint	17	Winter	16	N-1	Winter		15	N-1 switched	No constraint	None					
31	Freemans Bay	Winter	18	N-1	No constraint	17	Winter	15	N-1 switched	Winter		11	N-1 switched	No constraint	10+					Breach beyond the 10 years of the AMP
32	Glen Innes	Winter	20	N-1	No constraint	23	Winter	22	N-1	Winter		18	N-1	No constraint	None					
33	Greenhithe	Winter	20	N-1 switched	No constraint	9	Winter	9	N-1 switched	Winter		8	N-1 switched	No constraint	None					
34	Greenmount	Summer	40	N-1	No constraint	21	Winter	14	N-1 switched	Winter		7	N-1 switched	No constraint	10+					Breach beyond the 10 years of the AMP
35	Gulf Harbour	Winter	20	N-1 switched	No constraint	7	Winter	5	N-1 switched	Winter		4	N-1 switched	No constraint	None					

36		Hans	Summer	20	N-1 switched	No constraint	8	Summer	5	N-1 switched	Summer		0	N	Security	10+	Distribution back-up circuit capacity	Network upgrade	Planning stage		3rd Transformer ans subtransmission circuit
37		Hauraki	Winter	20	N-1 switched	No constraint	12	Winter	11	N-1 switched	Winter		9	N-1 switched	No constraint	None					
38		Helensville	Winter	15	N-1	No constraint	19	Winter	17	N-1	Winter		15	N-1	No constraint	None					
39		Henderson Valley	Winter	13	N-1 switched	No constraint	9	Winter	7	N-1 switched	Winter		4	N-1 switched	No constraint	10+					Breach beyond the 10 years of the AMP
40		Highbrook	Winter	23	N-1	No constraint	14	Winter	13	N-1	Winter		12	N-1	No constraint	None					
41		Highbury	Winter	13	N-1 switched	Capacity	-	Winter	0	N-1 switched	Winter		0	N-1 switched	Capacity	0	Zone substation transformer	Network upgrade	Implementation stage		2nd Transformer and subtransmission circuit
42		Hillcrest	Winter	24	N-1	No constraint	28	Winter	26	N-1	Winter		21	N-1	No constraint	None					
43		Hillsborough	Winter	20	N-1	No constraint	22	Winter	21	N-1	Winter		18	N-1	No constraint	None					
44		Hobson 110/11kV	Winter	25	N-1	No constraint	11	Winter	10	N-1	Winter		8	N-1	No constraint	None					
45		Hobson 22/11kV	Winter	12	N-1	No constraint	4	Winter	2	N-1	Winter		0	N	No constraint	10+	Distribution back-up circuit capacity	Network upgrade	Implementation stage		Marginal case will be offset though 11kV to 22kV conversion programme to off load at 11kV bus
46		Hobson 22kV	Winter	80	N-1	No constraint	29	Winter	0	N	Winter		0	N	Security	4	Zone substation transformer	Network upgrade	Implementation stage		Upgrade transformer
47		Hobsonville	Winter	13	N-1	No constraint	9	Winter	4	N-1 switched	Winter		2	N-1 switched	No constraint	10+					Breach beyond the 10 years of the AMP
48		Hobsonville Point	Winter	20	N-1	No constraint	23	Winter	12	N-1	Winter		6	N-1 switched	No constraint	10+					Breach beyond the 10 years of the AMP
49		Howick	Winter	40	N-1	No constraint	25	Winter	22	N-1	Winter		19	N-1	No constraint	None					
50		James Street	Winter	13	N-1 switched	No constraint	7	Winter	6	N-1 switched	Winter		3	N-1 switched	No constraint	10+					Breach beyond the 10 years of the AMP
51		Kaukapakapa	Winter	15	N-1 switched	No constraint	9	Winter	9	N-1 switched	Winter		9	N-1 switched	No constraint	None					
52		Keeling Road	Winter	37	N-1 switched	No constraint	21	Winter	19	N-1 switched	Winter		17	N-1 switched	No constraint	None					
53		Kingsland	Winter	20	N-1	No constraint	17	Winter	11	N-1 switched	Winter		3	N-1 switched	No constraint	10+					Breach beyond the 10 years of the AMP
54		Laingholm	Winter	8	N-1	No constraint	6	Winter	6	N-1	Winter		6	N-1	No constraint	None					
55		Lichfield	Winter	20	N-1	No constraint	4	Winter	4	N-1	Winter		4	N-1	No constraint	None					
56		Liverpool	Summer	40	N-1	No constraint	5	Winter	0	N	Winter		0	N	No constraint	10+	Zone substation transformer	Network upgrade	Planning stage		Marginal case will be offset though 11kV to 22kV conversion programme to off load at 11kV bus
57		Liverpool 22kV	Summer	150	N-1	No constraint	63	Winter	19	N-1	Winter		0	N	Security	9	Zone substation transformer	Network upgrade	Implementation stage		New Nicolas Zone Substation
58		Mangere Central	Winter	40	N-1	No constraint	22	Winter	16	N-1	Winter		9	N-1 switched	No constraint	10+					Breach beyond the 10 years of the AMP
59		Mangere East	Winter	20	N-1 switched	No constraint	11	Winter	9	N-1 switched	Winter		5	N-1 switched	No constraint	10+					Breach beyond the 10 years of the AMP
60		Mangere West	Summer	30	N-1	No constraint	14	Winter	10	N-1	Winter		7	N-1	No constraint	None					
61		Manly	Winter	13	N-1 switched	No constraint	7	Winter	6	N-1 switched	Winter		4	N-1 switched	No constraint	10+					Breach beyond the 10 years of the AMP
62		Manukau	Winter	40	N-1	No constraint	29	Winter	25	N-1	Winter		19	N-1	No constraint	None					
63		Manurewa	Winter	40	N-1 switched	No constraint	3	Winter	0	N-1 switched	Winter		0	N-1 switched	Capacity	6	Distribution back-up circuit capacity	Network upgrade	Implementation stage		11kV reinforcement to offload zone substation
64		Maraetai	Winter	15	N-1	No constraint	14	Winter	12	N-1	Winter		12	N-1	No constraint	None					
65		McKinnon	Summer	20	N-1	No constraint	23	Winter	21	N-1 switched	Winter		17	N-1 switched	No constraint	None					
66		Mcleod Road	Winter	16	N-1 switched	No constraint	7	Winter	7	N-1 switched	Winter		5	N-1 switched	No constraint	None					
67		McNab	Winter	40	N-1	No constraint	22	Winter	1	N-1 switched	Winter		0	N-1 switched	Capacity	6	Distribution back-up circuit capacity	Network upgrade	Planning stage		Rockfield third transformer
68		Milford	Winter	13	N-1 switched	No constraint	6	Winter	5	N-1 switched	Winter		3	N-1 switched	No constraint	10+					Breach beyond the 10 years of the AMP
69		Mt Albert	Winter	14	N-1 switched	No constraint	3	Winter	4	N-1 switched	Winter		1	N-1 switched	No constraint	10+	Subtransmission circuit	Network upgrade	Planning stage		New subtran circuits and 2nd transformer
70		Mt Wellington	Winter	20	N-1	No constraint	20	Winter	20	N-1	Winter		15	N-1 switched	No constraint	None					

71		New Lynn	Winter	13	N-1	No constraint	11	Winter	10	N-1	Winter		7	N-1 switched	No constraint	10+					Breach beyond the 10 years of the AMP
72		Newmarket	Winter	40	N-1	No constraint	27	Winter	19	N-1	Winter		8	N-1 switched	No constraint	10+					Breach beyond the 10 years of the AMP
73		Newton	Winter	16	N-1	No constraint	14	Winter	6	N-1 switched	Winter		0	N-1 switched	Capacity	9	Subtransmission circuit	Network upgrade	Planning stage		New planned Mt Eden zone substation to offload Newton
74		Ngataringa Bay	Winter	13	N-1 switched	Security	0	Winter	0	N	Winter		0	N	Security	0	Other	Network upgrade	Implementation stage		Substation will be decomissioned and Belmont will supply the area
75		Northcote	Winter	15	N-1 switched	No constraint	10	Winter	8	N-1 switched	Winter		7	N-1 switched	No constraint	None					
76		Onehunga	Winter	15	N-1	No constraint	11	Winter	8	N-1 switched	Winter		3	N-1 switched	No constraint	10+					Breach beyond the 10 years of the AMP
77		Orakei	Winter	18	N-1	No constraint	14	Winter	12	N-1	Winter		8	N-1 switched	No constraint	None					
78		Oratia	Winter	10	N-1 switched	No constraint	5	Winter	5	N-1 switched	Winter		5	N-1 switched	No constraint	None					
79		Orewa	Winter	20	N-1	No constraint	17	Winter	14	N-1	Winter		10	N-1	No constraint	10+					Breach beyond the 10 years of the AMP
80		Otara	Winter	30	N-1	No constraint	18	Winter	12	N-1 switched	Winter		5	N-1 switched	No constraint	10+					Breach beyond the 10 years of the AMP
81		Pacific Steel	Winter	40	N-1	No constraint	22	Winter	22	N-1	Winter		22	N-1	No constraint	None					
82		Pakuranga	Winter	20	N-1	No constraint	18	Winter	18	N-1	Winter		17	N-1	No constraint	None					
83		Papakura	Winter	20	N-1 switched	No constraint	9	Winter	6	N-1 switched	Winter		2	N-1 switched	No constraint	10+					Breach beyond the 10 years of the AMP
84		Parnell	Summer	15	N-1 switched	No constraint	11	Summer	11	N-1 switched	Summer		7	N-1 switched	No constraint	10+					Breach beyond the 10 years of the AMP
85		Ponsonby	Winter	12	N-1	No constraint	8	Winter	6	N-1 switched	Winter		2	N-1 switched	No constraint	10+					Breach beyond the 10 years of the AMP
86		Quay	Summer	20	N-1	No constraint	8	Summer	5	N-1	Summer		4	N-1	No constraint	None					
87		Quay 22kV	Summer	60	N-1	No constraint	17	Summer	1	N-1	Summer		0	N	Security	6	Distribution back-up circuit capacity	Network upgrade	Implementation stage		Upgrade transformers
88		Ranui	Winter	20	N-1 switched	No constraint	7	Winter	0	N-1 switched	Winter		0	N-1 switched	Capacity	6	Zone substation transformer	Network upgrade	Planning stage		2nd transformer
89		Red Beach	Winter	20	N-1	No constraint	18	Winter	12	N-1 switched	Winter		7	N-1 switched	No constraint	10+					Breach beyond the 10 years of the AMP
90		Remuera	Winter	20	N-1 switched	No constraint	15	Winter	12	N-1 switched	Winter		9	N-1 switched	No constraint	10+					Breach beyond the 10 years of the AMP
91		Riverhead	Winter	8	N-1 switched	No constraint	0	Winter	0	N-1 switched	Winter		0	N-1 switched	Capacity	1	Zone substation transformer	Network upgrade	Implementation stage		Replace transformers
92		Rockfield	Winter	20	N-1	No constraint	20	Winter	17	N-1	Winter		13	N-1 switched	No constraint	None					
93		Rosebank	Winter	22	N-1	No constraint	19	Winter	17	N-1	Winter		13	N-1 switched	No constraint	None					
94		Rosedale	Winter	20	N-1	No constraint	28	Summer	18	N-1	Winter		13	N-1 switched	No constraint	None					
95		Sabulite Road	Winter	13	N-1 switched	No constraint	5	Winter	3	N-1 switched	Winter		0	N-1 switched	Capacity	10+	Zone substation transformer	Network upgrade	Implementation stage		Replace transformers
96		Sandringham	Winter	20	N-1	No constraint	22	Winter	14	N-1	Winter		8	N-1 switched	No constraint	10+					Breach beyond the 10 years of the AMP
97		Simpson Road	Winter	8	N-1 switched	No constraint	3	Winter	3	N-1 switched	Winter		2	N-1 switched	No constraint	None					
98		Snells Beach	Winter	8	N-1 switched	Capacity	-	Winter	0	N-1 switched	Winter		0	N-1 switched	Capacity	0	Zone substation transformer	Network upgrade	Implementation stage		New Sandspit Zone substation to offload Snells Beach
99		South Howick	Winter	20	N-1	No constraint	14	Winter	12	N-1 switched	Winter		9	N-1 switched	No constraint	None					
100		Spur Road	Winter	20	N-1	No constraint	26	Winter	23	N-1	Winter		21	N-1	No constraint	None					
101		St Heliers	Winter	18	N-1	No constraint	16	Winter	14	N-1	Winter		11	N-1	No constraint	None					
102		St Johns	Winter	20	N-1	No constraint	22	Winter	20	N-1	Winter		16	N-1	No constraint	None					
103		Sunset Road	Winter	13	N-1	No constraint	12	Winter	10	N-1	Winter		7	N-1 switched	No constraint	10+					Breach beyond the 10 years of the AMP
104		Swanson	Winter	13	N-1 switched	No constraint	0	Winter	0	N-1 switched	Winter		0	N-1 switched	Capacity	1	Zone substation transformer	Network upgrade	Implementation stage		2nd Transformer
105		Sylvia Park	Summer	20	N-1	No constraint	13	Summer	13	N-1	Summer		13	N-1	No constraint	None					

106		Takanini	Winter	15	N-1 switched	Capacity	-	Winter	0	N	Winter		0	N	Capacity	0	Zone substation transformer	Network upgrade	Implementation stage		Add 3rd transformer and subtransmission cable
107		Takapuna	Winter	20	N-1	No constraint	29	Winter	26	N-1	Winter		21	N-1	No constraint	None					
108		Te Atatu	Winter	13	N-1 switched	No constraint	2	Winter	1	N-1 switched	Winter		0	N-1 switched	Capacity	7	Zone substation transformer	Network upgrade	Planning stage		Replace transformers
109		Te Papapa	Winter	20	N-1	No constraint	16	Winter	14	N-1 switched	Winter		12	N-1 switched	No constraint	None					
110		Torbay	Winter	13	N-1 switched	No constraint	4	Winter	4	N-1 switched	Winter		3	N-1 switched	No constraint	None					
111		Triangle Road	Winter	20	N-1	No constraint	26	Winter	25	N-1	Winter		22	N-1	No constraint	None					
112		Victoria	Summer	20	N-1	No constraint	17	Summer	17	N-1	Summer		15	N-1 switched	No constraint	None					
113		Waiake	Winter	13	N-1 switched	No constraint	5	Winter	5	N-1 switched	Winter		4	N-1 switched	No constraint	None					
114		Waiheke	Winter	13	N-1	No constraint	3	Winter	2	N-1	Winter		0	N	Security	10+	Zone substation transformer	Network upgrade	Planning stage		Replace transformers
115		Waikaukau	Winter	8	N-1 switched	No constraint	1	Winter	1	N-1 switched	Winter		0	N-1 switched	Capacity	10+	Zone substation transformer	Network upgrade	Planning stage		Transformer upgrade
116		Waimauku	Winter	30	N-1 switched	No constraint	12	Winter	10	N-1 switched	Winter		7	N-1 switched	No constraint	None					
117		Wairau Road	Winter	13	N-1 switched	No constraint	2	Winter	0	N-1 switched	Winter		0	N-1 switched	Capacity	2	Zone substation transformer	Network upgrade	Solution confirmed		Replace transformers
118		Warkworth	Winter	15	N-1 switched	No constraint	6	Winter	3	N-1 switched	Winter		0	N-1 switched	Capacity	9	Zone substation transformer	Network upgrade	Planning stage		Replace transformers + planned Warkworth South Zone substation
119		Wellsford	Winter	8	N-1	No constraint	6	Winter	4	N-1 switched	Winter		1	N-1 switched	No constraint	10+					Breach beyond the 10 years of the AMP
120		Westfield	Summer	20	N-1 switched	No constraint	13	Summer	8	N-1 switched	Summer		4	N-1 switched	No constraint	10+					Breach beyond the 10 years of the AMP
121		Westgate	Winter	20	N-1	No constraint	25	Winter	16	N-1	Winter		12	N-1	No constraint	None					
122		White Swan	Winter	29	N-1	No constraint	18	Winter	13	N-1	Winter		9	N-1	No constraint	None					
123		Wiri	Winter	40	N-1	No constraint	20	Winter	17	N-1 switched	Winter		11	N-1 switched	No constraint	10+					Breach beyond the 10 years of the AMP
124		Woodford	Winter	13	N-1 switched	No constraint	3	Winter	2	N-1 switched	Winter		0	N-1 switched	No constraint	10+					Breach beyond the 10 years of the AMP

Note: This includes all 11kV backstop capacity, using the Security of Supply Standard (percentile loading)

[†] *Extend table as necessary to disclose all capacity and constraint information by each zone substation*

Company Name	**Vector Limited**
AMP Planning Period	**1 April 2025 – 31 March 2035**

SCHEDULE 12c: REPORT ON FORECAST NETWORK DEMAND

This schedule requires a forecast of new connections (by consumer type), peak demand and energy volumes for the disclosure year and a 5 year planning period. The forecasts should be consistent with the supporting information set out in the AMP as well as the assumptions used in developing the expenditure forecasts in Schedule 11a and Schedule 11b and the capacity and utilisation forecasts in Schedule 12b.

sch ref

12c(i): Consumer Connections

Number of ICPs connected during year by consumer type

	Number of connections					
	Current Year CY 31 Mar 25	*CY+1* 31 Mar 26	*CY+2* 31 Mar 27	*CY+3* 31 Mar 28	*CY+4* 31 Mar 29	*CY+5* 31 Mar 30
*Consumer types defined by EDB**						
Residential & Small Medium Enterprise (SME)	13,621	12,327	11,788	13,109	12,796	10,322
Industrial & Commercial	142	179	179	179	179	133
Connections total	13,763	12,506	11,967	13,288	12,975	10,455

**include additional rows if needed*

Distributed generation

	31 Mar 25	31 Mar 26	31 Mar 27	31 Mar 28	31 Mar 29	31 Mar 30
Number of connections made in year	1,072	1,473	1,473	1,473	1,473	1,473
Capacity of distributed generation installed in year (MVA)	10	13	13	13	13	13

12c(ii) System Demand

		Current Year CY 31 Mar 25	*CY+1* 31 Mar 26	*CY+2* 31 Mar 27	*CY+3* 31 Mar 28	*CY+4* 31 Mar 29	*CY+5* 31 Mar 30
Maximum coincident system demand (MW)							
	GXP demand	1,787	1,913	1,994	2,090	2,206	2,341
plus	Distributed generation output at HV and above	15	15	15	15	15	15
	Maximum coincident system demand	1,802	1,928	2,009	2,104	2,221	2,356
less	Net transfers to (from) other EDBs at HV and above						
	Demand on system for supply to consumers' connection points	1,802	1,928	2,009	2,104	2,221	2,356
Electricity volumes carried (GWh)							
	Electricity supplied from GXPs	8,813	8,921	9,812	10,113	10,475	10,840
less	Electricity exports to GXPs						
plus	Electricity supplied from distributed generation	182	182	182	182	182	182
less	Net electricity supplied to (from) other EDBs						
	Electricity entering system for supply to ICPs	8,995	9,104	9,995	10,295	10,657	11,023
less	Total energy delivered to ICPs	8,648	8,752	9,608	9,898	10,245	10,597
	Losses	348	352	386	398	412	426
	Load factor	57%	54%	57%	56%	55%	53%
	Loss ratio	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%

4.6 Appendix 6 - Forecast interruptions and duration (Schedule 12d)

Company Name	**Vector Limited**
AMP Planning Period	**1 April 2025 – 31 March 2035**
Network / Sub-network Name	**Vector Limited**

SCHEDULE 12d: REPORT FORECAST INTERRUPTIONS AND DURATION

This schedule requires a forecast of SAIFI and SAIDI for disclosure and a 5 year planning period. The forecasts should be consistent with the supporting information set out in the AMP as well as the assumed impact of planned and unplanned SAIFI and SAIDI on the expenditures forecast provided in Schedule 11a and Schedule 11b.

sch ref		*Current Year CY* 31 Mar 25	*CY+1* 31 Mar 26	*CY+2* 31 Mar 27	*CY+3* 31 Mar 28	*CY+4* 31 Mar 29	*CY+5* 31 Mar 30
10	**SAIDI**						
11	Class B (planned interruptions on the network)	117.1	128.8	128.8	128.8	128.8	128.8
12	Class C (unplanned interruptions on the network)	104.8	110.1	110.1	110.1	110.1	110.1
13	**SAIFI**						
14	Class B (planned interruptions on the network)	0.58	0.63	0.63	0.63	0.63	0.63
15	Class C (unplanned interruptions on the network)	1.34	1.40	1.40	1.40	1.40	1.40

Note: The SAIDI and SAIFI forecast in Schedule 12d are calculated based on their normalisation.

Company Name	**Vector Limited**
AMP Planning Period	**1 April 2025 – 31 March 2035**
Network / Sub-network Name	**Southern**

SCHEDULE 12d: REPORT FORECAST INTERRUPTIONS AND DURATION

This schedule requires a forecast of SAIFI and SAIDI for disclosure and a 5 year planning period. The forecasts should be consistent with the supporting information set out in the AMP as well as the assumed impact of planned and unplanned SAIFI and SAIDI on the expenditures forecast provided in Schedule 11a and Schedule 11b.

sch ref		*Current Year CY* 31 Mar 25	*CY+1* 31 Mar 26	*CY+2* 31 Mar 27	*CY+3* 31 Mar 28	*CY+4* 31 Mar 29	*CY+5* 31 Mar 30
10	**SAIDI**						
11	Class B (planned interruptions on the network)	50.4	53.9	53.9	53.9	53.9	53.9
12	Class C (unplanned interruptions on the network)	48.8	46.1	46.1	46.1	46.1	46.1
13	**SAIFI**						
14	Class B (planned interruptions on the network)	0.30	0.28	0.28	0.28	0.28	0.28
15	Class C (unplanned interruptions on the network)	0.64	0.62	0.62	0.62	0.62	0.62

Company Name	**Vector Limited**
AMP Planning Period	**1 April 2025 – 31 March 2035**
Network / Sub-network Name	**Northern**

SCHEDULE 12d: REPORT FORECAST INTERRUPTIONS AND DURATION

This schedule requires a forecast of SAIFI and SAIDI for disclosure and a 5 year planning period. The forecasts should be consistent with the supporting information set out in the AMP as well as the assumed impact of planned and unplanned SAIFI and SAIDI on the expenditures forecast provided in Schedule 11a and Schedule 11b.

sch ref		*Current Year CY* **31 Mar 25**	*CY+1* **31 Mar 26**	*CY+2* **31 Mar 27**	*CY+3* **31 Mar 28**	*CY+4* **31 Mar 29**	*CY+5* **31 Mar 30**
10	**SAIDI**						
11	Class B (planned interruptions on the network)	66.7	74.9	74.9	74.9	74.9	74.9
12	Class C (unplanned interruptions on the network)	56.0	64.0	64.0	64.0	64.0	64.0
13	**SAIFI**						
14	Class B (planned interruptions on the network)	0.28	0.35	0.35	0.35	0.35	0.35
15	Class C (unplanned interruptions on the network)	0.70	0.79	0.79	0.79	0.79	0.79

4.7 Appendix 7 - Mandatory explanatory notes on forecast information (Schedule 14a)

1. This Schedule requires EDBs to provide explanatory notes to reports prepared in accordance with clause 2.6.6.
2. This Schedule is mandatory - EDBs must provide the explanatory comment specified below, in accordance with clause 2.7.2. This information is not part of the audited disclosure information, and so is not subject to the assurance requirements specified in Section 2.8.

Commentary on the difference between nominal and constant price capital expenditure forecasts (Schedule 11a)

3. In the box below, comment on the difference between nominal and constant price capital expenditure for the current disclosure year and 10 year planning period, as disclosed in Schedule 11a.

BOX 1: COMMENTARY ON DIFFERENCE BETWEEN NOMINAL AND CONSTANT PRICE CAPITAL EXPENDITURE FORECASTS

Vector has used the capital expenditure inflator based on the model used by the Commerce Commission in its DPP price reset on 1 April 2025. We have used a forecast of the Capital Goods Price Index (CGPI) as the inflator with a compounded uplift of 0.80% specified by the Commerce Commission.

Vector has used the NZIER (New Zealand Institute of Economic Research) September 2024 CGPI forecast up to December 2030. Thereafter, we have assumed a long-term CGPI inflation rate of 2.0% with a compounded uplift of 0.80%.

The capex inflator forecast reduces from 4.36% in RY25 to 2.82% in RY32 and is stable thereafter.

The constant price capital expenditure forecast is inflated by the above-mentioned index to convert to a nominal price capital expenditure forecast.

Commentary on the difference between nominal and constant price operational expenditure forecasts (Schedule 11b)

4. In the box below, comment on the difference between nominal and constant price operational expenditure for the current disclosure year and 10-year planning period, as disclosed in Schedule 11b.

BOX 2: COMMENTARY ON DIFFERENCE BETWEEN NOMINAL AND CONSTANT PRICE OPERATIONAL EXPENDITURE FORECASTS

Vector has used the operational expenditure inflator based on the model used by the Commerce Commission in its DPP price reset on 1 April 2025. We have used an inflator which is a mix of the Producer Price Index (PPI) and the Labour Cost Index (LCI) with a compounded uplift of 0.30% specified by the Commerce Commission. The weighting between PPI (40%) and LCI (60%) is as per the Commission's model.

Vector has used the NZIER (New Zealand Institute of Economic Research) September 2024 PPI (Producer Price Index - inputs) and LCI (Labour Cost Index) forecasts up to December and June 2028 respectively. Thereafter, we have assumed a long-term inflation rate of 2.0% for both metrics with the 0.30% compounded uplift.

The constant price operational expenditure forecast is inflated by the above-mentioned index to convert to a nominal price operational expenditure forecast.

4.8 Appendix 8 - Certification for year-beginning disclosures (Schedule 17)

Schedule 17 Certification for Year-beginning Disclosures

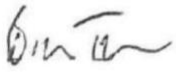
Clause 2.9.1

We, Bruce Turner and Paul Hutchison, being directors of Vector Limited certify that, having made all reasonable enquiry, to the best of our knowledge:

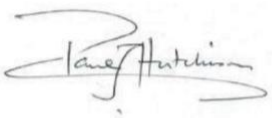
a) The following attached information of Vector Limited prepared for the purposes of clauses 2.6.3, 2.6.6 and 2.7.2 of the Electricity Distribution Information Disclosure Determination 2012 in all material respects complies with that determination.

b) The prospective financial or non-financial information included in the attached information has been prepared 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 Vector Limited's corporate vision and strategy and are documented in retained records.



Director



Director

28 March 2025

Date