

# DPP4 REOPENER APPLICATION – OPOTIKI SUB-TRANSMISSION DEVELOPMENT PROJECT

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# 1. EXECUTIVE SUMMARY

#### Horizon Networks needs to spend above its DPP4 allowances to address growth-driven network constraint issues at Opotiki

The Opotiki region is experiencing growth-driven network constraint issues. Under all probable growth scenarios, the system is forecast to reach capacity in FY27. Action needs to be taken to ensure there is no material deterioration in quality of supply for consumers in the Opotiki region.

Horizon Networks has identified that the Opotiki Sub-Transmission Development project is an enduring, efficient, and prudent solution to the impending quality of supply issues Opotiki consumers are forecast to face from FY27.

This project has an expected cost of \$14.3M and is scheduled for commissioning across FY26 and FY27. The project's scope includes establishing a new 33kV Point of Supply at Transpower's Waiotahi Grid Exit Point (GXP), 33kV circuits to Opotiki and Te Kaha Substations, establishing regulated 11kV supplies at Opotiki, and other enabling work on the 11kV networks.

A forecast foreseeable large project reopener is requested. While this project was communicated in the 2024 Asset Management Plan, which was used as the basis for setting allowances for DPP4, even after reprioritisation, the \$14.3M of commissioned assets cannot be accommodated within the existing DPP4 allowances.

# Reopening the default price-path to allow for the Opotiki sub-transmission project meets the objectives set out in Part 4 of the Commerce Act 1986

Horizon Networks is acutely aware of the impact reopening the default price-path (DPP) could have on our consumers. It is essential that any decision meets the objectives as set out under Part 4 of the Commerce Act and is for the long-term benefit of consumers.

The purpose statement in Part 4 of the Commerce Act has four key limbs.

The first limb of the purpose statement seeks to ensure that EDBs such as Horizon Networks have incentives to innovate and invest to ensure that sufficient resources are available to replace, upgrade and build new assets to meet the needs of our community. The current DPP4 allowances do not incentivise Horizon Networks to invest in necessary upgrades at Opotiki to meet their needs.

The second limb of the purpose statement seeks to ensure that EDBs provide the level of service that consumers demand. The Opotiki sub-transmission project reflects a phased approach to the development of the Opotiki network, meeting immediate consumer demand for no material degradation in quality in the face of growth-driven constraint issues, while providing future focussed solution that provides additional resilience and supports the long-term development of the region.

The third limb of the purpose statement is to share efficiency gains with consumers. While not explicit in this application, as more load is connected to the network, the cost associated with of this "core network" asset will be recovered across more consumers, resulting in lower costs to consumers, relative to constraining the network and preventing the load from connecting.

The fourth limb of the purpose statement is to limit EDBs ability to extract excessive profits. This is managed through the DPP4 allowable revenue calculations and provides a regulated return on investment proportional to the value of the investment.

# The consumer impact of allowing an additional \$14.3M of additional investment in the network is not excessive

If Horizon Networks is permitted to recover the costs associated with the Opotiki Sub-Transmission Development project, then the average residential consumer will face an increase in distribution charge of \$1.48 per month (\$17.80 per annum). Across the five years of DPP4 this will recover \$4.62M, representing a 1.83% increase in total revenue. This additional \$1.48 per month will pay for the upgrades necessary to help ensure that Opotiki has a safe, reliable supply of electricity for the foreseeable future.

This will be recovered across all consumers that use Horizon Networks, (apart from our individually priced major customer consumers) in a manner that is consistent with our Pricing Methodology and the Electricity Authority's distribution pricing principles.

# 2. PROJECT BACKGROUND AND SCOPE

Horizon Energy Distribution Limited – HEDL (trading as Horizon Networks) owns, manages, and operates the electricity network that serves consumers the Eastern Bay of Plenty region.

Horizon Networks is 100% owned by Trust Horizon. The Trust was set up to provide funding towards the energy-related initiatives for consumers on Horizon Networks, driving the region economically and technologically forward and bringing prosperity and pride to the Eastern Bay of Plenty community

#### 2.1. Network Needs

[to meet clause 4.5.10 (1) (b) & 4.5.15 (6) - Expenditure objectives]

#### 2.1.1. Network Background

The 11kV network in the Opotiki District serves approximately 4,450 customers. It is supplied by Transpower's Waiotahi Grid Exit Point (GXP) at 11kV through two (2) 110/33/11kV transformers<sup>1</sup>.

The Opotiki region is currently supplied via four (4) 11kV feeders originating from Transpower's Waiotahi Grid Exit Point (GXP). Three of these feeders extend eastward to supply the Opotiki township and surrounding coastal communities. In 2016, these feeders were interconnected at Opotiki through a closed-mesh network configuration, supported by a newly constructed 11kV bus and substation. This upgrade was specifically designed to improve voltage stability across the region and to accommodate future transition to a 33kV supply.

Despite these improvements, the 11kV feeders reach up to 50km from the Waiotahi GXP to their furthest load points. This long distance results in significant voltage drop, limiting the effective capacity of the network to approximately 11.2MW before voltage performance falls below acceptable thresholds. This constraint is increasingly material as regional demand grows and electrification initiatives progress.

A fourth 11kV feeder extends westward from Waiotahi GXP to supply the Waimana township. This feeder spans 34km to its end-of-line, with Waimana located approximately 21km from the GXP. Like the eastern feeders, this line is subject to voltage and capacity limitations due to its length and rural load profile.

The existing network configuration and its inherent limitations are now constraining growth and reliability in the region. The 2016 infrastructure was intentionally future-proofed to support a 33kV supply to Opotiki, and current conditions indicate that this transition is becoming increasingly necessary to maintain service quality and enable regional development

Figure 1 depicts the network configuration in the Opotiki region shown as a simplified single-line diagram, and geospatially.

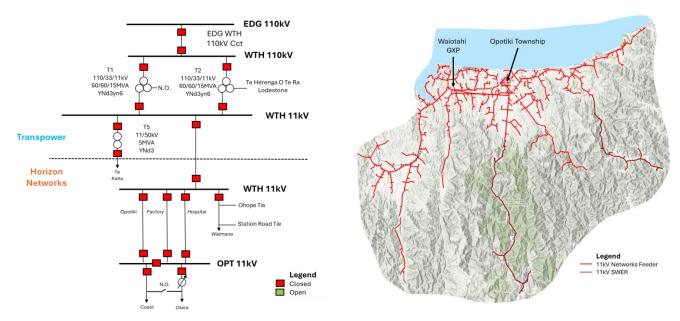


Figure 1: Current Network Configuration for Opotiki electricity supply<sup>2</sup> and the Geospatial View

<sup>&</sup>lt;sup>1</sup> The two (2) supply transformers at Waiotahi were recently upgraded from two (2) 110/11kV 10MVA transformers to two (2) 110/33/11kV 60/60/15MVA transformers in November 2024 and April 2025 respectively by Transpower, as part of the enabling work for two large scale solar farms directly connecting to Transpower at 33kV.

<sup>&</sup>lt;sup>2</sup> Transformer ratings 60/60/15MVA are for 110kV/33kV/11kV windings respectively

#### 2.1.2. Historic Growth and Demand Forecast

Since FY16, Horizon Networks has observed growth indicators in the Opotiki region, underpinned by several strategic developments. These include targeted investment from the Provisional Growth Fund (PGF) to bolster the aquaculture and horticulture sectors, as well as the development of a new harbour in Opotiki. Furthermore, Horizon Networks has seen a sustained increase in the number of connections in the Opotiki region, as illustrated in Figure 2.

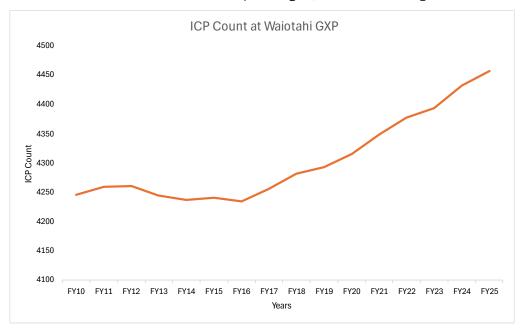


Figure 2: Historic ICP Count sourced from Electricity Authority Electricity Market Information (EMI)

Horizon Networks commenced the Opotiki Sub-Transmission Development project in FY23 following the observed sustained load growth in since 2018 combined with an accelerated ICP growth.

The estimated baseline growth rate is 1.9% p.a at Opotiki. This takes into account forecasted population growth in the region as well as the location of residential development specified in the Opotiki District Council's Long-Term Plan and the Eastern Bay of Plenty Spatial Plan for the first 10-years. Additional details of the Opotiki's Long-Term Plan and the Eastern Bay of Plenty Spatial Plan are available in Appendix B.

Existing consumers are also putting pressure on the network with increasing electricity demand. In 2019, a mussel farm development was completed. This farm has a supply capacity of 1.5MW. The customer is not yet utilising the full capacity of this connection, however Horizon Networks expects demand at this site to increase in the near future.

As illustrated in Figure 3 and Table 1, the 11kV networks at Opotiki will be constrained by FY27 under all scenarios. The methodology underpinning these forecasts was co-developed with the University of Auckland and is presented in Section 7 of Horizon Networks' 2025 AMP<sup>3</sup>.

During the preparation of the 2025 AMP, we observed a slowdown in decarbonisation activities across the Eastern Bay of Plenty region, particularly in Electric Vehicle (EV) uptake. Our analysis indicates this slowdown does not impact the need and timing of the Opotiki Sub-Transmission Project. Organic growth is the major contributor to load growth at Opotiki. Section 7 of Horizon Networks' 2025 AMP details historic uptake of EVs and solar photovoltaic (PV).

With its relatively high sunshine hours, the Eastern Bay of Plenty is well-placed for solar generation, supported by the solar farm connection enquiries received. The Opotiki Sub-Transmission Project will facilitate the future connection of solar farms in the region.

<sup>&</sup>lt;sup>3</sup> Horizon Networks' 2025 AMP is available in the following link: <a href="https://cdn.sanity.io/files/i6v1mrdi/production/4622549493e3cd672435fca7965fd0cc7cb57add.pdf">https://cdn.sanity.io/files/i6v1mrdi/production/4622549493e3cd672435fca7965fd0cc7cb57add.pdf</a>

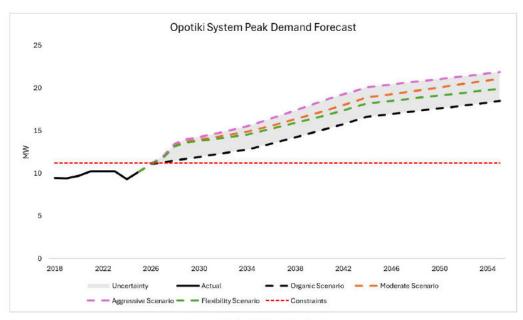


Figure 3: Opotiki Load Projection

Actual **Forecast** Capacity FY26 **FY27** FY28 FY29 FY30 FY35 FY40 FY45 FY50 Scenario FY25 Organic 10.20 11.29 11.70 11.91 13.13 14.97 16.79 11.09 11.49 17.61 Moderate 10.20 11.08 11.87 13.26 13.76 13.96 15.22 17.13 19.10 20.08 11.2 11.05 11.80 13.16 13.62 13.78 14.88 16.61 18.36 19.12 **Flexibility** 10.20 Aggressive 10.20 11.14 11.99 13.44 14.00 14.26 15.97 18.35 20.26 21.05

Table 1: Long-Term 30Y Load Forecast (Peak Load per Financial Year)

# 2.1.3. Consequence of Delaying Expenditure

#### [to meet clause 4.5.10 (1) (c)]

The network constraint issue at Opotiki has manifested through increasing low bus voltage events at the Opotiki 11kV bus. The occurrences of low bus voltage events have been increasing since 2024. Figure 4 shows the voltage measured at Opotiki and Horizon Networks' SCADA's Warning and Alarm threshold.

Without investment in the Opotiki sub-transmission project, undervoltage events will become even more frequent and consumers will start to experience non-compliant voltages at their points of supply. Electricity consumers' demand will not be met, if investment in the electricity infrastructure in the region is insufficient to support the economic and population growth that has been indicated by the District Council's Long-Term Plan, and the Eastern Bay of Plenty Spatial Plan<sup>4</sup>.

<sup>&</sup>lt;sup>4</sup> Additional details of the Opotiki District's Long-Term Plan and the Eastern Bay of Plenty Spatial Plan are available in Appendix B.



Figure 4: Historic Voltage Measurement at Opotiki

## 2.2. Project Scope

Multiple options were evaluated to provide interim capacity relief and potentially defer major network upgrades (refer to Section 2.4). Following detailed analysis, the most cost-effective long-term solution is to upgrade the supply voltage at the Waiotahi GXP to 33kV. The project requires a conversion of one existing 11kV and one existing 50kV feeders to 33kV, installation of new 33/11kV transformers and 33kV switchgear at Opotiki, reconfiguration work at Waiotahi and the 11kV network at Opotiki. Figure 5 and Figure 6 show the Single Line Diagram (SLD) of the proposed sub-transmission supply to Opotiki and the geospatial location, respectively.

#### Zone Substation Work - Waiotahi GXP

A new 33kV indoor bus is to be established by Transpower, allowing 33kV supplies to Horizon Networks at Waiotahi GXP. Once commissioned, the existing Transpower's 11kV and 50kV supply at Waiotahi will be disestablished.

Horizon will install a (1) new 33/11kV 7.5MVA transformer and Ring Main Unit Circuit Breakers at Waiotahi to maintain 11kV supplies for customers surrounding the Waiotahi GXP and Waimana area. A new control building (portacom) is required to house the relays and DC supplies for the RMU Circuit Breakers.

#### **Sub-Transmission Supply**

The dual sub-transmission line will traverse circa 10km between Transpower's Waiotahi GXP and the load centre at Opotiki. The sub-transmission lines will utilise existing assets (the existing Te Kaha 50kV circuit and the existing Opotiki 11kV feeder). The Opotiki 11kV feeder will be upgraded to a 33kV design, and the Te Kaha 50kV circuit will be operated at 33kV without major upgrade work. This will significantly reduce the cost of establishing a sub-transmission supply to Opotiki.

#### Zone Substation Work - Opotiki Substation

Horizon Networks will install a new 33kV indoor bus in the existing building that houses the existing 11kV switchgear at Opotiki Substation. The building was commissioned in 2016 as part of the commissioning of the 11kV switchgear<sup>5</sup>, has been designed and built to include the provision of future 33kV switchgear in the same building.

Two (2) 33/11kV 24MVA transformers will be installed at Opotiki. The transformers are sized to allow for future growth from economic or population growth, as well as additional load from decarbonisation activities in the region, as per forecasted scenarios in Table 1. The new transformers will regulate the 11kV supply at Opotiki and resolve voltage compliance risks during high load periods.

<sup>&</sup>lt;sup>5</sup> Horizon Networks has bussed the three (3) 11kV feeders in 2016 and operate the 11kV feeders in a close-mesh network. As part of the project, a new 11kV building and switchgear were commissioned at the Opotiki substation site.

#### Zone Substation Work - Te Kaha Substation

The Te Kaha 11kV networks are supplied from one (1) 50-33/11kV 7.5MVA transformer. Minimal enabling work is required at Te Kaha substation to allow for a transition of supply voltage from 50kV to 33kV.

#### **Distribution Network Changes**

A new 11kV feeder will be established to supply the residential load at Wellington Street. Due to the expected improvement in the 11kV voltage after the establishment of the 33kV supplies at Opotiki, the 11/0.4kV distribution transformers in the area will be re-tapped appropriately.

Once the sub-transmission supplies to Opotiki are established, there is no need for a standby voltage regulator<sup>6</sup> for the Otara 11kV feeder. The voltage regulator will be repurposed for supporting future growth and Waiotahi T11 outages for the Waimana feeder.

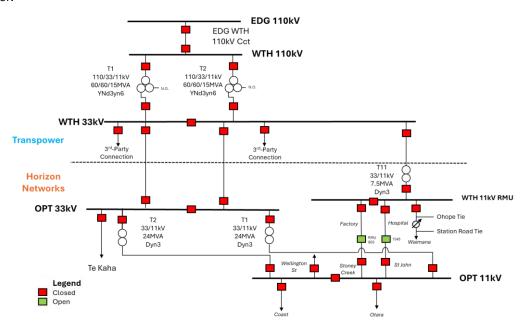


Figure 5: Opotiki Sub-Transmission Network Proposed Configuration

<sup>&</sup>lt;sup>6</sup> The voltage regulator was installed at its current site in 2011 and has not been used since the establishment of the Opotiki 11kV Mesh Networks in 2016. The voltage regulator is located outside the perimeter of the Opotiki Substation and on neutral tap.



Figure 6: Geospatial Map of Opotiki Sub-Transmission Network Proposed Configuration

# 2.3. Project Timeline

The new assets for Opotiki and Waiotahi will be connected from a new 33kV switchgear from Transpower at Waiotahi GXP. Transpower's 33kV switchgear is anticipated to be commissioned in December 2025, Horizon Networks will commission the associated assets by March 2026. This includes Opotiki T1, 33kV switchgear at Opotiki, and the conversion of our Te Kaha 50kV feeder to 33kV.

Opotiki T2 and the associated assets are expected to be commissioned by February 2027.

Key project milestones for the Opotiki Sub-Transmission Development are summarised in Table 2.

[supplement information for clause 4.5.15 (3), (4A) – commission may amend the DPP in respect to OPEX or commissioned assets after the date on which the reopener event was nominated]

Table 2: Time of Opotiki/Waiotahi Development project with the expected delivery date

Project Milestones	Expected Completion Date
Transpower Works Agreement Established	Completed
Civil and Electrical Design for Opotiki and Waiotahi	Completed
Civil works at Opotiki	Completed
Relocate Ripple Plant from Waiotahi to Opotiki/Relocate and Install Voltage Regulator on Waimana Feeder	Oct-25
Liven Transpower 33kV Switchboard	Dec-25
Civil works at Waiotahi	Dec-25
Liven Opotiki South Feeder at 33kV, 33kV switchgear at Opotiki, Te Kaha feeder at 33kV, Opotiki T1	Mar-26
Liven Waiotahi T11	May-26
Liven Opotiki North Feeder	Aug-26

11kV network re-arrangement at Opotiki	Nov-26
Liven T2 at Opotiki	Feb-27

# 2.4. Other Solution Considered

# [supplement information for clause 4.5.10 (1) (k) – project is prudent (benefit consumer long term)]

During the optioneering stage, Horizon Networks has explored several solutions to defer the need for a sub-transmission network to supply Opotiki. The alternative options considered include implementing non-network solutions and network reconfiguration that can provide additional capacity to the existing 11kV networks.

Each technically feasible option was assessed against a set of success criteria, including:

- · Resilience to demand changes: The option's vulnerability or ability to withstand a step change in demand
- Timing and availability: How soon the solution could be implemented and whether it would be available when
  required.
- Cost efficiency: Measured by cost per unit of unlocked capacity (\$/MW).

The options that were considered are summarised in Table 3.

Table 3: Other solutions considered for the deferment of Investment

Option Description	Estimated Cost	Why Option Was Not Selected				
Option 1 – BESS Solution to Defer Network Upgrade Horizon Network explored a second-hand 1MW/2MWh Battery Energy Storage Solution (BESS) that came into the market to provide network support by peak shaving and voltage support to defer the network investment.	\$0.8M	Acquiring a BESS solution at an economical price that aligns with our investment deferment objectives has proven challenging. In addition, the option remains exposed to sudden changes in demand or new developments within the region. At best, this option only provides deferment of the required sub-transmission work by one year.  This option was not selected due to the limited availability of BESS units at the right price point, including second-hand BESS units, and its vulnerability to demand volatility, which undermines its reliability as a sustainable long-term solution.				
Option 2 – Establish a fourth 11kV feeder to the Opotiki bus Horizon Networks explored an option of establishing a fourth 11kV feeder to the Opotiki 11kV bus and operating the 11kV network as a 4-feeder closed-mesh network.  The option proposes to utilise the existing Te Kaha 50kV feeder at 11kV, rerouting the feeder to Opotiki by building an additional 2km of line, and relocate the 50kV supply from Waiotahi to Opotiki.  The relocation of the 50kV supply to Opotiki requires the acquisition of Transpower's Waiotahi T5 11/50kV Step-up Transformer, the 50kV circuit breaker, their associated secondary assets, transportation of the equipment to Opotiki, and additional civil work at Opotiki substation.	\$0.7M	The configuration will enable an additional 1MW capacity. However, the associated cost is significant with a capacity unlocked unit cost of of \$0.7M/MW compared with \$0.4M/MW for the preferred sub-transmission option.  While this option could defer the required sub-transmission works by one year, it remains highly sensitive to sudden changes in regional demand or development, reducing its overall cost-effectiveness.  For these reasons, this option was not pursued.				
Option 3 – Third-Party Distributed Energy Resources (DER) providing Network Support	N/A	Historic battery uptakes in the region has no material influence in reducing peak demand.				

Horizon Networks investigated the potential for thirdparty DERs providing network support at Opotiki as a means to defer the investment in the subtransmission networks.

The option relies on DERs contributing to peak demand reduction by generating electricity during high load periods. For the solution to be effective, the DER adoption rate would need to outpace the projected organic growth in network demand.

Horizon Networks' forecasts suggest that the uptake of battery systems in Opotiki will materially lag behind organic load growth. This misalignment between forecast consumer DER adoption and network needs reduces the viability of consumer-led DERs as a credible network support option.

At the time of the sub-transmission solution was selected, there was significant uncertainty regarding the availability and capability of third-party DER providers to deliver the required network support. For these factors, this option was deemed unsuitable and not pursued further.

The Opotiki sub-transmission project is prudent because is the most efficient solution and provides the best long-term benefits to consumers, compared to the alternatives available.

The costs associated with the Opotiki sub-transmission project are efficient because, as noted in section 3.1 below:

- Major equipment, detailed design and civil installation was subject to a competitive tender process, so reflect market rates.
- Line design and electrical works are subject to related party arm's-length transaction requirements, as set out in the Electricity Distribution Services Input Methodologies, which promotes the purpose of Part 4 of the Commerce Act.

# 3. PROJECT COST

#### 3.1. Project Cost Breakdown

#### [to meet clause 4.5.10 (1)(h), (2), (3)]

Horizon Networks' procurement policy governs the acquisition of products and services, ensuring they are of high quality and represent value for money. This policy underpins the procurement strategy for this project, which includes:

#### 1. A competitive tendering process for major equipment, detailed design, and civil installation works

These competitively sourced components were selected to ensure cost efficiency and deliver value for money. Cost estimates from preferred tenders have informed budget planning and internal business case approvals. Approximately 40% of the project cost has been subject to competitive tendering. The following equipment and services have been procured through this process.

- Two (2) Opotiki 33/11kV 24MVA KNAF Power Transformers T1 & T2
- One (1) Waiotahi 33/11kV 7.5MVA KNAF Power Transformers T11
- Opotiki Electrical and Civil Design
- Opotiki Civil Works
- Waiotahi Electrical and Civil Design
- Waiotahi Civil Works

#### 2. Delivery of line design and electrical works by Horizon Services Limited (HSL) on a cost pass-through basis

Line design and electrical works are being delivered by Horizon Services Limited (HSL), a related party to Horizon Networks. In accordance with Horizon Networks' procurement policy, HSL is the preferred supplier of electrical services for Horizon Networks. This includes for the design and construction services associated with the Opotiki Sub-Transmission Project.

Services provided by HSL to Horizon Networks are subject to a cost pass-through arrangement. Horizon Network will ensure that the value received is fair and reasonable to Horizon Networks and does not exceed the cost incurred by HSL to provide the service. This is consistent with all services delivered by HSL to Horizon Networks

and reflects a transparent and cost-effective delivery model. In 2024, Horizon Networks' Information Disclosure included a report from an independent appraiser addressing related party transactions. The appraiser concluded that Horizon Networks complied with section 2.3.6 of the Electricity Distribution Information Disclosure Determination 2012, as well as sections 2.2.11(1)(g) and 2.2.11(5) of the Input Methodologies, which set out the requirements for disclosing and valuing related party transactions, including that they are valued not greater than if that transaction had the terms of an arms-length transaction.<sup>7</sup>

The cost estimate shown in Table 4 reflects our best assessment as of 12th August 2025.



# 3.2. Commissioning Asset Forecast

# [to meet clause 4.5.10 (1)(f), (2)]

The livening of Horizon Networks' assets is dependent on Transpower commissioning its 33kV switchboard at the Waiotahi GXP and making it available to Horizon Networks. The commissioning of Transpower's switchboard is expected to happen in December 2025. The majority of Horizon Networks' assets established as part of this project are forecasted to be commissioned in the last quarter of FY26, except the Waiotahi T11 33/11kV transformer, 33kV Opotiki North Feeder and the Opotiki T2 33/11kV transformer, which will be energised in FY27, as per the project milestone table (Table 2).

Table 5 summarises the commissioned assets forecast for the Opotiki sub-transmission project.

Table 5: Commissioned Assets Forecast for DPP4

(\$'000)	FY26	FY27	FY28	FY29	FY30	DPP4 Total
CAPEX - System Growth	7,865	6,404	-	-	141	14,269

# 4. REOPENER JUSTIFICATION

# 4.1. The Opotiki Sub-Transmission Project is a Foreseeable Large Project

[to meet clause 4.5.10 (1) (i), 4.5.13 (1)(b)]

#### 4.1.1. Foreseeable large project criteria

The Opotiki sub-transmission project is a foreseeable large project because:

<sup>&</sup>lt;sup>7</sup> Horizon Networks information disclosure for retailed party transactions, and associated independent appraisers report for the year ended 31 March 2024 can be found at:

https://cdn.sanity.io/files/i6v1mrdi/production/0cf59cd0fd5c5cf8876cb763ed0b27adaab66b24.pdf

- 1. **The primary driver of the project is system growth expenditure** As covered in section 2.1, the network is expected to be constrained during peak periods from 2027 under all growth scenarios.
- 2. **The Opotiki sub-transmission project is prudent** As covered in the 2025 Asset Management Plan, the Opotiki sub-transmission project is necessary to meet peak demand voltage stability and growth needs for consumers in the Opotiki region.
- 3. The Opotiki sub-transmission project was considered by the Commerce Commission The 2024 Asset Management Plan, considered by the Commerce Commission when setting DPP4 included provision for the Opotiki sub-transmission as a specific, named significant project scheduled for implementation by 2027.
- 4. The Opotiki sub-transmission project was not provided for in the Horizon Networks FNAR, despite the project being included in the 2024 AMP used by the Commerce Commission when setting DPP4 The Opotiki sub-transmission project was included in the 2024 AMP which formed the basis for the DPP4 decision. However, the DPP4 decision on FNAR did not provide sufficient allowance to accommodate this project. Specifically, the DPP4 decision provided for \$63.5M of commissioned assets (nominal, including IFRS16 assets), against the 2024 AMP forecast commissioned assets of \$87.7M (nominal). Following reprioritisation for the 2025 AMP, Horizon Networks expects to commission \$22.2M of more assets across DPP4 that are not provided for in the DPP4 decision. This reprioritised expenditure represents necessary investment to meet consumer needs and is outlined in sections 4.1.2 and 4.2.2 below.
- 5. **The expenditure for the Opotiki sub-transmission project exceeds \$1.9M** The total value of commissioned assets for the Opotiki sub-transmission project is expected to be \$14.3M. This exceeds \$1.9M which is 1% of the forecast net allowable revenue for Horizon Networks for the DPP4 regulatory period.8
- 6. The capital contributions received are consistent with Horizon Networks' policy on capital contributions Horizon Networks capital contribution policy<sup>9</sup> does not provide for capital contributions for specific system growth projects that are triggered by underlying growth. Horizon Networks does collect infrastructure development contributions, and these are reported as "capital contributions funding consumer connection" in the AMP and fully utilised each year.
- 7. The proposed additional revenue will be apportioned by Horizon Networks appropriately As covered in Section 4.3, Cost Recovery Through Reopener, the proposed additional revenue impacts all categories of consumers. Consistent with the Horizon Network pricing methodology, recovery of any additional revenue will be from all mass market consumer groups.

# 4.1.2. Reconciliation of Horizon Networks' 2025 AMP expenditure against DPP4 allowances

Horizon Networks' 2025 asset management plan reflects the organisation's most up-to-date forecast of necessary expenditure to meet network and consumer needs, while maintaining service quality and avoiding material degradation in supply.

During the development of this reopener application, it has become evident that although the capital expenditure forecasts in the 2024 AMP and the 2025 AMP accurately represented Horizon Networks' expectations at the time, the translation of these forecasts into commissioned asset values was flawed. This has resulted in an under-forecast of \$8.5 million in commissioned assets over the DPP4 period.

This discrepancy is primarily driven by two factors:

- 1. **Commissioned asset lag assumption** An assumption was applied that commissioned assets would be \$1 million lower than capital expenditure in each year of DPP4. This approach led to a cumulative under-forecast of \$5 million in commissioned assets.
- 2. **Exclusion of historic Opotiki sub-transmission project expenditure** The capital expenditure for the Opotiki sub-transmission project in FY24 and FY25 was not included in the forecast of commissioned assets for DPP4. This omission resulted in a further \$3.75 million under-forecast across the first two years of the regulatory period.

The 2025 AMP reprioritisation process has reduced forecast expenditure (and commissioned assets) by \$10.7M compared to the 2024 AMP.

<sup>&</sup>lt;sup>8</sup> The DPP4 decision set the forecast net allowable revenue for Horizon Networks at \$186,510,000 for the five years of DPP4. Therefore 1% of this is \$1,865,100.

<sup>9</sup> https://cdn.sanity.io/files/i6v1mrdi/production/bc008c65885fc0b76c266efc6ed55ef1fe5c32ba.pdf

The combined impact of reprioritisation and correction for commissioning assumptions is summarised in Table 6.

Table 6: Forecast commissioned assets in Horizon Networks' 2024 AMP and 2025 AMP

(\$'000)	2024 AMP	2025 AMP
Forecast commissioned assets (nominal)	87,722	77,032
Under-forecast of commissioned assets (DPP4)	5,000	5,000
Carry-over of Opotiki sub-transmission expenditure in FY24 / FY25	3,750	3,750
Sub-total	96,472	85,782
DPP4 Commissioned asset allowance	63,520	63,520
Forecast of commissioned assets not provided for in DPP4	32,952	22,262

This reconciliation highlights that even following reprioritisation the Opotiki sub-transmission project cannot be provided for within DPP4 allowances.

#### 4.2. Prioritisation of Planned CAPEX and OPEX for the Remainder of DPP

#### [to meet clause 4.5.10 (1) (c)]

Horizon Networks gained and maintained its ISO55001 accreditation since 2022. ISO55001 is an internationally standard for asset management systems. The goal of the standard is to maximise the value of assets while balancing operational risks and costs.

# 4.2.1. Horizon Networks' Reprioritisation Process

As part of Horizon Networks' asset management process, Horizon Networks reviews and re-prioritises the work programmes in its long-term 10-year plan on an annual basis to reflect the current strategic focus, risks and opportunities, forecasts, and the changes to both local and macro environments. Horizon Networks asset management philosophy and planning approach are set out in Chapter 4 Asset Management Strategy & Framework and Chapter 9 Network Planning Principles in the published 2025 Asset Management Plan. Figure 7 illustrates the annual review and reprioritisation framework.

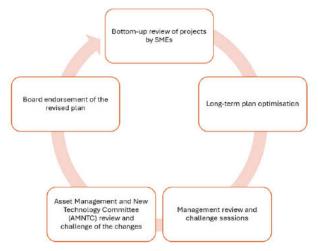


Figure 7: Annual Review and Reprioritisation of Horizon Networks' Long Term Plan

The annual review process involves robust assessment bottom-up assessment of projects that involves subject matter experts in planning, asset management, engineering, field delivery, and operations.

The outputs then reviewed and challenged by the senior management before presenting to the Asset Management and Technology Committee (AMNTC). After AMNTC satisfied with the plan, the Committee will recommend to the Board for final approval.

Our prioritisation process takes into account asset risk, demand forecast, cost/benefit, health and safety, compliance requirements, and reactive work based on historical level of spending and trend forecast, It also considers deliverability and financial impacts before the plan is finalised.

#### 4.2.2. Outcome of the 2025 AMP Prioritisation Process

At the time of this reopener application, the works programme outlined in Horizon Networks' 2025 AMP reflects the outcome of the most recent prioritisation process. The 2025 AMP forecast expenditure represents a reprioritisation of the 2024 AMP programme, which was used by the Commerce Commission to set the Default Price-Quality Path (DPP4). As a result of this reprioritisation, \$10.7 million (nominal) of capital expenditure has been deferred from DPP4 to future regulatory periods.

Table 7 presents the forecasted commissioned assets for DPP4 period based on Horizon Networks' 2025 AMP. Of note, 88% of forecast CAPEX and commissioned assets fall into three categories:

- Asset replacement and renewal \$48.1M (56%) this expenditure is essential for replacing aging and high risk assets. Deferring this investment would risk a material degradation in the quality and reliability of line services provided to consumers.
- System growth \$19.3M (23%) this expenditure includes necessary investment to meet growing demand. The
  majority (74%) of this expenditure is attributed to the Opotiki sub-transmission project. The remaining \$5M
  supports other system growth initiatives across the DPP4 period.
- 3. Non-network assets \$7.8M (9%) a significant proportion of this expenditure relates to the relocation of Horizon Networks office to Concordia House, including \$2.9M for the lease capitalisation and \$1M for essential fittings (such as control room infrastructure). This investment is critical to maintain operational continuity and support the effective delivery of distribution services.

Further details on the breakdown of all necessary expenditure are available in Horizon Networks' 2025 AMP.

Given the prioritisation outcomes, there is no scope to further defer or reprioritise projects within other CAPEX categories to reduce the overall forecast to fit within the DPP4 allowance. Approval of the Opotiki sub-transmission project reopener application is necessary to ensure Horizon Networks can meet consumers' system growth needs.

Spent Category	Sub-Category	Commissioned Asset Forecast for DPP4 (\$M) (Nominal)	
Network CAPEX	Customer Connection	\$0.8M	1%
	System Growth	\$19.5M <sup>10</sup>	23%
	Asset Replacement and Renewal	\$48.1M	56%
	Asset Relocation	\$0.1M	0%
	RSE: Quality of Supply	\$3.2M	4%
	RSE: Legislative and Regulatory	\$1.7M	2%
	RSE: Others	\$5.9M	7%
Non-Network CAPEX	Non-Network Assets	\$7.8M	9%

\$1.0M

-\$2.4M

\$85.8M

1%

-3% **100%** 

Table 7: Horizon Networks' 2025 AMP Commissioned Asset Forecasted in DPP4 Breakdown by Category

**Total Commissioned Asset Forecast** 

Cost of Financing

Capital Contribution

<sup>4.2.3.</sup> Further Deprioritisation Will Worsen Asset Risk Beyond Horizon Networks' Risk Appetite

<sup>&</sup>lt;sup>10</sup> Including of \$3.7M spent on the Opotiki Sub-Transmission Project during DPP3.

Horizon Networks has established Asset Risk Model<sup>11</sup> to ensure risks associated with existing assets are adequately managed. The risk model has been reviewed by an external consultant, and the outcome of the review suggested that the risk model provide robust outputs and is suitable for prioritising replacements, and that Horizon Networks' approach to asset management aligns with approved industry methodologies and industry leaders. The outcome letter from the external consultant is available in Appendix D.

Further deprioritising work beyond the investment level set in the 2025 AMP will deteriorate assets beyond Horizon Networks' risk tolerance. If investment levels are reduced to match the DPP4 allowance level, Horizon Networks' Asset Risk Models forecasts that 4.3% (or 1,927) of assets will be at high risk by the end of the planning period. Figure 8 shows the comparison of forecasted asset risk profiles if investment levels are kept to Horizon Networks' proposed 2025 AMP work programme (Left), and the deteriorated risk profile from the spend level capped at DPP4 allowance (Right).

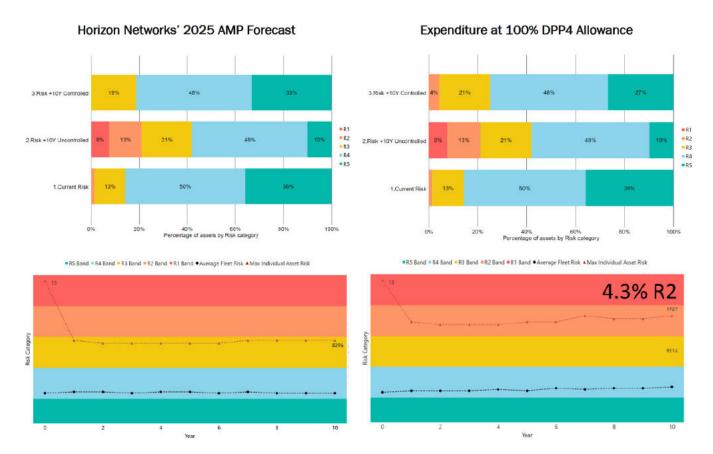


Figure 8: Scenario Analysis - Asset Risk Model Forecast: Horizon Networks' 2025 AMP Forecast of Approximately 120% of DPP4 Allowance (Left) and Expenditure at 100% of DPP4 Allowance

For further details of Horizon Networks' long-term prioritisation principles and tools, refer to Appendix C for the paper Horizon Networks presented at the 2024 EEA Conference.

The assessment of consequential OPEX is not relevant for this application.

# 4.3. Cost Recovery Through Reopener

[to meet clause 4.5.10 (1) (o), (1) (a), 4.5.15 (1), (2), (5)]

#### 4.3.1. Impact of the reopener on allowable revenue

If approved, the increase in allowed commissioned assets in FY26 and FY27 will increase Horizon Networks' revenue from \$186.510M to \$191.130M (\$4.620M) across DPP4. This is a 2.48% increase in allowable revenue, from the DPP4 decision.

The impact on allowable revenue has been calculated by using the Commerce Commission's Financial model for DPP4, dated 20 November 2024, adding the projected \$7.865M of commissioned assets for FY26 and \$6.404M of commissioned assets for FY27 to the existing value of commissioned assets in in the input tab, and measuring the change in BBAR before tax for each year across DPP4.

Commissioned Assets – allowance (\$000)	2026	2027	2028	2029	2030
DPP4 Final Decision	11,817	13,847	13,388	12,258	12,210
With Opotiki Reopener approved	19,682	20,251	13,388	12,258	12,210
Difference	7,865	6,404	0	0	0

Table 8: Impact of reopener on Commissioned Assets

Table 9: Impact of reopener on Allowable Revenue

Allowable Revenue impact (\$000)	2026	2027	2028	2029	2030
DPP4 Final Decision MAR	34,128	35,646	37,231	38,888	40,617
With Opotiki Reopener approved	34,973	36,529	38,154	39,851	41,623
Difference	845	883	922	963	1,006

# 4.3.2. Forecast impact on network charges

Horizon Networks proposes to recover the costs from all mass-market consumers across the network.

This is consistent with Horizon Networks pricing methodology, which sets urban and rural prices for consumer groups, regardless of their location within the network. The allocation of charges across consumer groups, as outline in Horizon Networks pricing methodology is appropriate and aligns with the Electricity Authority's distribution pricing principles.

Alignment with the distribution pricing principles is demonstrated in section 11 of Horizon Networks 2025/26 distribution pricing methodology<sup>12</sup>.

Horizon Networks distribution pricing methodology is appropriate, and in the most recent (2023) scorecard, Horizon Networks distribution pricing methodology was ranked 6<sup>th</sup> out of 29 EDBs<sup>13</sup> with a score of 4.2 out of 5<sup>14</sup>.

Due to pricing having been already set for FY26, recovery of the requested additional \$4.62M in revenue over DPP4 will only impact price setting for FY27-FY30.

Horizon Networks has modelled the impact of reopening the price path, based on FY26 pricing model, forecast consumption and ICP count.

After taking into account the pass-through of Transmission charges, on average, consumer distribution charges would increase by approximately 1.83%.

The average residential consumer would pay an additional \$17.80 per annum (\$1.48 per month increase from FY26 line charges) in line charges, to cover the costs of the Opotiki sub-transmission project.

## 4.4. DPP Reopener is More Appropriate Than CPP

#### [to meet clause 4.5.13 (1) (d)]

A DPP reopener is more appropriate than a CPP, as the reopener application relates to a single project with a very clear scope and limited consumer impact.

The reopener does not have an impact on a wide range of costs; and is poorly aligned with the criteria that the Commerce Commission should have regard to when considering if a CPP proposal is more appropriate.

- The Opotiki sub-transmission project is not part of a wider programme of work The Opotiki sub-transmission project is a specific, targeted project designed to address a known problem.
- The Opotiki sub-transmission project will have limited impact on prices The Opotiki sub-transmission project will increase distribution charges by an average of 1.83% for all consumers. For an average residential consumer, this will increase the distribution charge element of their bill by \$1.48 per month (\$17.80 per annum).
- A large proportion of consumers will be impacted by the reopener Horizon Networks pricing methodology does
  not discriminate by location. As a result, all mass market consumers will be impacted by the reopener, however
  the average impact will be limited to increasing the lines charge element of their bill by approximately 1.83%.
- An amendment to the price path will not have any upstream or downstream effects on the network Amending
  the price path to allow for the Opotiki sub-transmission project will have no upstream or downstream effects on

<sup>12</sup> Available at https://cdn.sanity.io/files/i6v1mrdi/production/507c2f38dd98741f14335c58c6e5b13326a6be1e.pdf

<sup>&</sup>lt;sup>13</sup> Full report available at: <a href="https://www.ea.govt.nz/documents/3883/Information\_paper-2023\_Distribution\_pricing\_scorecards.pdf">https://www.ea.govt.nz/documents/3883/Information\_paper-2023\_Distribution\_pricing\_scorecards.pdf</a>

<sup>&</sup>lt;sup>14</sup> Horizon Networks 2023 distribution pricing scorecard available at: <a href="https://www.ea.govt.nz/documents/3910/Horizon">https://www.ea.govt.nz/documents/3910/Horizon</a> Network s4sShVw.pdf

the network. Even though it is not allowed for in the DPP4 decision, it is considered necessary to address an immediate network need.

• The foreseeable large project value does not exceed \$30 million – The forecast value of commissioned assets for the Opotiki sub-transmission project does not exceed \$30 million de minimis specified in 4.5.14(1)(e).

The Opotiki sub-transmission project is one of four potential foreseeable large projects that, following reprioritisation, are not covered by the DPP4 allowances.

The Opotiki sub-transmission project is the subject of this application. The remaining three projects are unlikely to be required until later in the DPP period, at which point the need, timing and value will be more certain.

# 5. APPENDIX A: REOPENER CRITERIA

IM Reference	Criteria	Assessment	Supporting Evidence
	Clause 4.5.1 When a	DPP may be amended	
(1) (a)	The Commission may amend an EDB's DPP if the Commission is satisfied that- (a) a reopener event has occurred;	A reopener event has occurred because the application relates to a foreseeable large project which will be commissioned within the DPP4 reopener window.	Assessment against 4.5.1(2) 4.5.1(2A) 4.5.1(3) (a) 4.5.1(3) (b) 4.5.1(3) (c)
<b>1</b> (b)	(b) the DPP should be amended; and	Amending the DPP will support the purpose of Part 4 of the Act by providing an incentive for Horizon Networks upgrade the assets supplying Opotiki to meet current and future demand.	Section 1 Section 2.1
<b>1</b> (c)	(c) the amendment to the DPP is consistent with clause 4.5.15	The amendment to the DPP is consistent with clause 4.5.15, as per our detailed assessment against 4.5.15	Assessment against 4.5.15
(2)	A 'reopener event' is an event, or a series of related events, of a type specified in subclause (3), that occurs in the period that: (c) begins on the date that is 18 months before the start of the DPP regulatory period; and (d) ends at the end of the DPP regulatory period.	This reopener event relates to assets being commissioned across FY26 and FY27. This period sits between 1 October 2023 (18 months before the DPP4 regulatory period) and 31 March 2030 (the end of the DPP regulatory period).	Section 3.2
(2A)	The Commission may treat an event as occurring within the period in subclause (2) if:  (a) that event is a reopener event (responsive) that occurred earlier than 18 months before the start of the DPP regulatory period; and (b) the Commission considers exceptional circumstances existed such that an application to reopen the preceding DPP regulatory period was not reasonably possible before the end of that period.	This clause does not apply as this application does not relate to a reopener event (responsive)	N/A
(3) (a)	For the purpose of subclause (2), the types of events are: (a) the following, each being a type of reopener event (responsive): (i) a catastrophic event; (ii) a change event; (iii) an error event; (iv) the discovery of false or misleading information; (v) a major transaction event; or	This clause does not apply as this application does not relate to a reopener event (responsive)	N/A

IM Reference	Criteria	Assessment	Supporting Evidence
	(vi) a risk event; or		
(3) (b)	(b) the following, each being a type of reopener event (prospective): (i) an unforeseeable large project; or (ii) a foreseeable large project; or	This application relates to a foreseeable large project.	Section 4.1
(3) (c)	(c) the provision by an EDB of a quality standard variation proposal that the Commission is satisfied complies with clause 4.5.12(2).	This clause does not apply as this application does not request a quality standard variation.	N/A
	Clause 4.5.10 Fores	eeable Large Projects	
(1) (a-e)	A 'foreseeable large project' is a project or programme that has a primary driver of meeting demand for- (a) connection capex; (b) system growth expenditure; (c) asset relocation capex; (d) a combination of connection capex and system growth expenditure; or (e) resilience capex	(b) System Growth expenditure. The project addresses 11kV network constraints on distribution networks resulting from ongoing underlying growth in the region and aims to provide additional capacity to support future demand on the distribution network.	Section 2.1
(1) (f)	The EDB's forecasts used by the Commission for setting the DPP to which the project or programme relates did include that project or programme for either: (i) a disclosure year within the current DPP regulatory period or within a future DPP regulatory period; or (ii) disclosure years within the current DPP regulatory period or within a future DPP regulatory period or within a future DPP regulatory period;	The project was included in Horizon Networks' 2024 AMP with the forecasted commissioning years of FY26 and FY27.  Section 11.4 and Appendix C of Horizon Networks' 2024 AMP outline the need and details of the Opotiki Sub- Transmission Project	Section 4.1
(1) (g)	The amount of capital contributions to be received by the EDB for the project or programme is sufficient in the circumstances, and is in accordance with the EDB's usual policy on capital contributions;	No capital contribution to be received. Horizon Networks' capital contribution policy does not provide for capital contributions for specific system growth projects that are triggered by underlying growth.	Section 4.1
(1) (h)	The relevant expenditure specified in subclause (2) for the project or programme exceeds one of the thresholds specified in subclause (3)	The expected cost of this project is \$14.3M, which exceeds the 1% FNAR threshold of \$1.85M applicable to Horizon Networks.	Section 3.1 Section 3.2 Section 4.1
(1) (i)	The project or programme was foreseeable for the DPP regulatory period, however:  (i) it would have been reasonable for a prudent EDB not to have forecast, before the start of the DPP regulatory period, the extent to which the EDB's most recent forecast of the total value of commissioned assets for the project or programme exceeds the total value of commissioned assets for the project	Horizon Networks has forecasted the need for the project and included it in Horizon Networks' 2024 AMP, which the commission used for setting the DPP  The project was not provided for Horizon Networks' forecast net allowable revenue (FNAR) in the DPP.	Section 4.1

IM Reference	Criteria	Assessment	Supporting Evidence
	or programme included in the EDB's capex forecast used by the Commission for setting the DPP; or		
	(ii) the project or programme was not provided for in the EDB's forecast net allowable revenue, despite the project or programme being included in the forecasts used by the Commission for setting the DPP to which the project or programme relates; and		
(1) (j)	In respect of paragraph (a), an authorised officer of the connecting party has confirmed in writing to the Commission that it is committed to the project or programme;	This clause does not apply as the primary driver is system growth.	N/A
(1) (k)	In respect of paragraph (b), the EDB has provided sufficient evidence to the Commission that the project or programme is prudent;	The investment is prudent to address the load-driven capacity constraint due to voltage issues on the 11kV networks. Alternative solutions were explored but were not selected as per Section 2.4.	Section 2.1 Section 2.4
(1) (I)	In respect of paragraph (c), an authorised officer of a relocation party has confirmed in writing to the Commission that it is committed to the project or programme;	This clause does not apply as primary driver is system growth.	N/A
(1) (m)	In respect of paragraph (d),- (i) an authorised officer of the connecting party has confirmed in writing to the Commission that it is committed to the project or programme; and  (ii) the EDB has provided sufficient evidence to the Commission that the project or programme for system growth expenditure is prudent;	This clause does not apply as primary driver is system growth.	N/A
(1) (n)	In respect of paragraph (e), the EDB has provided sufficient evidence to the Commission that the project or programme is prudent; and	This clause does not apply as primary driver is system growth.	N/A
(1) (0)	Any proposed additional revenue sought will be apportioned by the EDB appropriately between different parties.	Horizon Networks proposes to recover the costs from all mass-market consumers across the network, consistent with our current pricing methodology.	Section 4.3
(2)	For the purposes of subclause (1)(h), the relevant expenditure for a project or programme is- (a) in the case of system growth expenditure that includes an opex solution, the forecast	Clause (2)(a) does not apply since the Opotiki project is a system growth-driven CAPEX solution.  The relevant expenditure of the project is estimated to be \$14.3M. This is the	Section 3.1 Section 3.2 Section 4.1 Section 4.2

IM Reference	Criteria	Assessment	Supporting Evidence
	total lifetime solution costs plus any consequential capex; or  (b) in any other case,- (i) the forecast total value of commissioned assets for the project or programme; (ii) less- (A) any capital contributions; and (B) any amounts included in the EDB's capex forecast and provided for by the Commission in setting the DPP to which the project or programme relates; (iii) plus any forecast consequential opex for the DPP regulatory period.	forecast total value of commissioned assets for the project.  There are not capital contributions and no amounts included in Horizon Networks CAPEX forecast that were provided for by the DPP.  The assessment of consequential OPEX is not relevant for this application	
(3)	For the purposes of subclause (1)(h), the thresholds are- (a) 1% of the EDB's forecast net allowable revenue for the DPP regulatory period; and (b) \$5 million for Vector Limited or Powerco Limited, or \$2.5 million for any other EDB.	Horizon Networks' 1% FNAR is \$1.85M. The project cost of \$14.3M exceeds the 1% FNAR threshold.	Section 3 Section 4.1
	Clause 4.5.13 Commission Conside	eration of Whether to Amend the DPP	
(1) (a)	If satisfied that a reopener event has occurred, the Commission must, when deciding whether to amend the DPP, have regard to at least each of the following matters (to the extent that the Commission considers the matter is relevant):  (a) the impact of the reopener event given the relevant circumstances, including both positive and negative effects, on the EDB's costs, revenues, and quality outcomes;	If approved, this will increase Horizon Network's revenue by approximately 2.48% \$4.62M over DPP4.  Consumers will experience a 1.83% increase in line charges, with the average residential consumer expecting to see a \$1.48 per month (\$17.80 per annum increase in line charges).  The Opotiki sub-transmission project will improve quality outcomes for all consumers in the Opotiki region.  Without investment in the Opotiki sub-transmission project, undervoltage events will become even more frequent and consumers will start to experience non-compliant voltages at their points of supply. Electricity consumers' demand will not be met, and the electricity infrastructure in the region will be insufficient to support future economic and population growth.	Section 2.1.3 Section 4.3
(1) (b)	The extent to which the DPP provides explicitly or implicitly for the reopener event;	The Opotiki sub-transmission project was not provided for in Horizon Networks' FNAR, despite the project being included in the 2024 AMP used	Section 4.1

IM Reference	Criteria	Assessment	Supporting Evidence
		by the Commerce Commission when setting DPP4.	
(1) (c)	If an EDB nominated the reopener event:  (i) whether the action required to respond to the reopener event's adverse consequences can be delayed until a future regulatory period;  (ii) the extent to which the EDB:  (A) contributed to the adverse consequences of the reopener event by its action or omission; and (B) could have prevented or overcome the adverse consequences of the reopener event by exercising reasonable diligence at reasonable cost;  (iii) whether the EDB's planned capex and opex for the remainder of the regulatory period have been appropriately reviewed and reprioritised; and	Deferment of the Opotiki subtransmission project will lead to more frequent undervoltage events on Horizon Networks' 11kV feeders. Horizon Networks has evidence that undervoltage warning and alarm states have increased in frequency between 2023 and 2025 due to underlying load growth.  The project was included in the 2024 AMP, which was the basis for the DPP4 decision. However, the DPP4 decision on FNAR did not provide sufficient allowance for this project.  Horizon Networks has reviewed and reprioritised the works programme with the programme proposed in the 2025 AMP being the outcome of the latest prioritisation of Horizon Networks' workplan.  Horizon undertook a sensitivity analysis using the reduced investment levels forecast to reprioritise the CAPEX programme and assess the long-term impact on our asset risk profile. The proposed investment level in the 2025 AMP enables Horizon Networks to maintain asset risk within an acceptable range.  In contrast, the investment level prescribed under the DPP4 decision would significantly elevate the asset risk profile beyond Horizon Networks' current risk appetite.	Section 2.1.3 Section 4.1 Section 4.2
(1) (d)	Whether a CPP proposal is more appropriate than an amendment to the DPP under this subpart.	The reopener relates to a single project with a very clear scope and limited consumer impact	Section 4.4
2)	Subclause (1)(d) does not apply in the case of an error event, a major transaction event, or the discovery of false or misleading information.	Horizon Networks is nominating the event under the Foreseeable Large Project reopener event; hence it does not need to satisfy this clause.	N/A
	Clause 4.5.15 Amending	DPP After Reconsideration	
(1)	If the Commission decides that the DPP should be amended, the Commission may	Horizon Networks proposes to recover costs through a reopening of the price path.	Section 4.3

IM Reference	Criteria	Assessment	Supporting Evidence
	amend 1 or more of the following matters specified in the DPP determination: (a) price path; (b) quality standards; and (c) quality incentive measures.	Horizon Networks is not proposing to amend the quality standards and quality incentive measures.	
(2)	The Commission may amend the price path in respect of any type of reopener event except for the provision by an EDB of a quality standard variation proposal.	Horizon Networks proposes to recover costs through a reopening of the price path.	Section 4.3
(3)	In the case of a reopener event (prospective), the Commission may amend the price path to account for opex incurred or assets commissioned only in respect of opex incurred or assets commissioned after the date on which the reopener event was nominated under clause 4.5.2.	The application is submitted to the commission in Q2 FY26. Assets are expected to be commissioned in Q4 FY26	Section 2.3 Section 4.1
(4)	In the case of a reopener event (responsive), the Commission may amend the price path to account for opex incurred or assets commissioned only in respect of opex incurred or assets commissioned after the date of the reopener event.	Horizon Networks is nominating the reopener event as prospective (foreseeable large projects)	N/A
(4A)	For the purposes of subclause (3), the date on which the reopener event was nominated under clause 4.5.2 means the first date on which an EDB provides the information referenced in clause 4.5.2(3) to the Commission. For the avoidance of doubt, the fact that the Commission seeks further information from an EDB as part of its assessment will not change that date.	The application is submitted to the commission in Q2 FY26. Assets are expected to be commissioned in Q4 FY26	Section 2.3 Section 4.1
(5)	The Commission must not amend- (a) the price path more than is reasonably necessary to mitigate the effect of the reopener event on the DPP; and (b) the price path more than is reasonably necessary to take account of the change resulting from the reopener event, less any costs already approved in a reopener event allowance for the same reopener event.	The amendment to the price-path is no more than is reasonably necessary, to recover the prudent costs associated with delivering an enduring solution to meet consumer needs.	Section 4.1 Section 4.3
(6)	In determining the extent of any amendment to the price path, the Commission must take into account the expenditure objective.	The project addresses voltage issues on Horizon Networks' 11kV networks at Opotiki due to continual load growth in the region. This meets the expenditure objective by reflecting the efficient costs that a prudent EDB would require to manage demand within the Opotiki region with no material degradation in quality.	Section 2

IM Reference	Criteria	Assessment	Supporting Evidence
(7)	In the case of a risk event, the Commission may only amend the opex included in the price path in respect of a risk event where opex is more cost effective than capex in addressing the risk event.	Horizon Networks is nominating the reopener event as prospective (foreseeable large projects). Hence the clause is not applicable	N/A
(8)	In the case of an unforeseeable large project or a foreseeable large project, the Commission must not amend the price path by more than an amount that reflects the efficient costs that a prudent non-exempt EDB would incur in undertaking that project.	The Opotiki sub-transmission project is prudent because is the most efficient solution and provides the best long-term benefits to consumers, compared to the alternatives available.  The costs associated with the Opotiki sub-transmission project are efficient because:  Major equipment, detailed design and civil installation was subject to a competitive tender process, so reflect market rates; and  Line design and electrical works are subject to related party arm's-length transaction requirements, as set out in the Electricity Distribution Services Input Methodologies, which promotes the purpose of Part 4 of the Commerce Act.	Section 2.4 Section 3
(9)	The Commission may amend the quality standards or quality incentive measures in respect of any type of reopener event.	Horizon Networks is nominating the reopener event as prospective (foreseeable large projects). Horizon Networks is not proposing an amendment to the quality incentive measures	N/A
(10)	The Commission must not amend the quality standards or quality incentive measures more than is reasonably necessary,- (a) in the case of a quality standard variation, to reflect the Commission's decision on the quality standard variation; or (b) in any other case, to mitigate the effect of the reopener event on quality.	Horizon Networks is nominating the reopener event as prospective (foreseeable large projects). Horizon Networks is not proposing an amendment to the quality incentive measures so this clause is not applicable.	N/A

# 6. APPENDIX B: FUTURE GROWTH INDICATORS

The Whakatane, Kawerau, and Opotiki District Councils are working with the iwi, government agencies and Toi Moana Bay of Plenty Regional Council to create a spatial plan (Eastern Bay of Plenty Spatial Plan) that will shape the region's future 15.

Figure 9 illustrates the future development plans in the Opotiki region, with planned projects including Te Huata Mussel Spat hatchery, Kiwifruit packaging, Shellfish processing factory, Truffle collective, water storage development, Opotiki Harbour development, dairy and Agriculture between Opotiki and Te Kaha<sup>16</sup>. To support migration and population growth in the region, new residential developments are planned in the Woodlands and Hukutaia area. These areas are currently being supplied by constrained Opotiki 11kV networks.

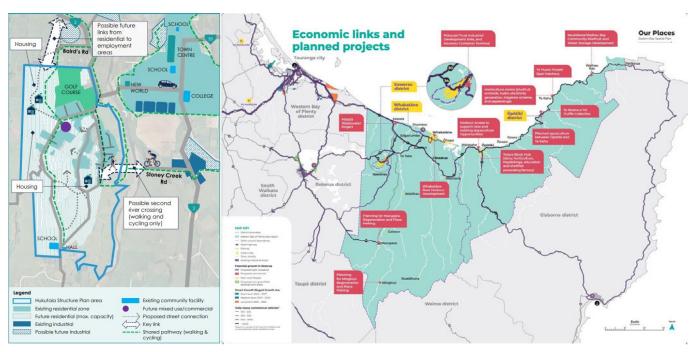


Figure 9: Hukutaia Residential Development Plan<sup>17</sup> (Left) and Economic Growth Plan in the Opotiki District<sup>18</sup> (Right)

Following the 2024 update of its Long Term Plan, the Opotiki District Council has revised the population projection, forecasting accelerated and sustainable growth in the region. The population is expected to grow between 0.8% to 1.8% per annum for the next 10 years as illustrated in Figure 10. Beyond the initial 10-year period, the population growth is expected to continue growing but at a slower rate.

<sup>&</sup>lt;sup>15</sup> Eastern Bay of Plenty Spatial Plan: <a href="https://ourplacesebop.org.nz/">https://ourplacesebop.org.nz/</a>

<sup>16</sup> EBOP Spatial Plan Economic Links and Planned Projects Map

<sup>17</sup> Hukutaia: Housing Our Current and Future Residents

<sup>&</sup>lt;sup>18</sup> EBOP Spatial Plan Economic Links and Planned Projects Map

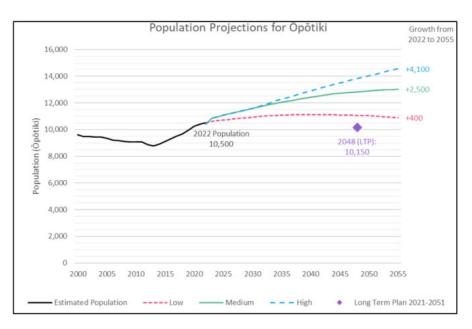


Figure 10: Opotiki District Population Projection to 2055 (Forecasted from Opotiki District Council Long Term Plan 2024-2034)<sup>19</sup>

<sup>19</sup> Long Term Plan 2024-2034

7. APPENDIX C: EEA 2024 CONFERENCE PAPER – LONG-TERM PLANNING INTO UNCERTAIN FUTURE

# 8. APPENDIX D: ASSET RISK MODEL REVIEW OUTCOME

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14 April 2023

Feng Wu



Dear Feng

#### HORIZON RISK MODEL REVIEW OUTCOME

Edison has recently completed a review of Horizon's Asset Risk Model. Horizon use this model to prioritise asset replacements within asset groups/classes. The review found that the Risk Model and Framework is suitable for risk ranking assets to prioritise replacements. Horizon's approach to asset replacements aligns with approved industry methodologies and industry leaders.

Edison has examined the risk methodology, the contributing components of the model and the sensitivity of the model to those components. Risk is the product of Asset Health and Asset Criticality. Horizon's asset health index is a modified version of the UK DNO Common Network Asset Methodology asset health calculations. This is an industry approved assessment method that Horizon has modified to retain the fundamental aspects while better representing Horizon's knowledge of how their own assets degrade over time.

Horizon also has a credible basis for the criticality of its assets. Criticality assessment is made in relation to four key groups based on the recommendation of the EEA.:

- Public Safety
- Work Safety
- Service Level
- Environment

The Edison sensitivity analysis showed that the Horizon Risk Model is appropriately sensitive to the contributing factors. The model is most sensitive to age and expected life. This sensitivity will decrease as asset inspections decrease the proportion of assets relying on age rather than asset health inspection data. The sensitivity can be tuned, and it is recommended that Horizon implement a change process to control and document changes.

Overall, we have found that the model provides a robust output and a framework that can be improved over time. While improvements are being planned, Horizon can be confident in their Risk Model outcomes.

Kind regards



Richard Kingsford | General Manager Design & Engineering Solutions

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