14 May 2024

Ben Woodham / Hamish Groves
Commerce Commission
Te Komihana Tauhokohoko

Tēnā korua

UNISON NETWORKS LIMITED MAY 2024 UNFORESEEN MAJOR PROJECT REOPENER APPLICATION

1. Unison Networks Limited (**Unison**) applies to reopen its Default Price-Quality Path 2020-2025. This application is made under Subpart 5, Clause 4.5.5A relating to an unforeseen major capex project, as defined by the Electricity Distribution Services Input Methodologies Determination 2012 (Input Methodologies Determination) currently in force.

2. This is Unison's second application to reopen the default price quality-path in this regulatory period (**DPP3**). This is the redacted version for publication.

3. Unison's second reopener application is set out as follows:
   a. Introduction
   b. Project background
   c. Reasonable exclusion
   d. Capital Contributions Policy
   e. Project reflects efficient costs
   f. Project timeline
   g. Reopener criteria for Connection Capex
   h. Impact on the price-path
   i. Appendices

Introduction

4. This application is for the supply of new 60MW connection requested by Contact Energy Ltd (**Contact Energy**) relating to a new geothermal power station, Te Huka 3. Unison's connection from the Te Huka 3 power station will convey electricity generation to the national grid through Unison's local distribution network.

5. Unison applies to increase its allowances by $5.766 million in FY25, noting the assets will be commissioned in the final year of DPP3 (expected in June 2024).

Supporting documents	Purpose	Location
Reopener criteria table	Demonstrating criteria are met	Application supported by appendices
Customer letter	Customer confirmation of commitment to the Project	**Appendix One**
Capital contributions policy	Description of consistency	Application supported by **Appendix Two** Capital Contributions Policy in place 14 April 2022 to 24 October 2023 (during the period the Unison Works Agreement was signed)
Unison Works Agreement	Extracts relating to the criteria	**Appendices Three to Five**

Project background

Tauhara reopener application

6. In February 2021, Contact Energy entered into an agreement with Unison for the supply of electricity from Unison's network for the construction and operation of Contact Energy's Tauhara Geothermal Power Station (**Tauhara**) near Taupō. As you are aware, the Commission approved Unison's application to reopen the price-path to cover this unforeseen major capex project in March 2022.

7. After its commitment to Tauhara, Contact Energy also provided Unison with reasonable certainty that the Te Huka 3 Geothermal Power Station would proceed.

Te Huka 3 new connection

8. The Te Huka 3 Project provides connection from the Te Huka 3 Power Station to:
    a. Unison's network (non-regulated assets – referred to in supporting documentation as "dedicated assets"); and
    b. the national grid via the Tauhara Grid Exit Point (**GXP**) (regulated assets subject to this reopener application, referred to in supporting documentation as "shared assets").

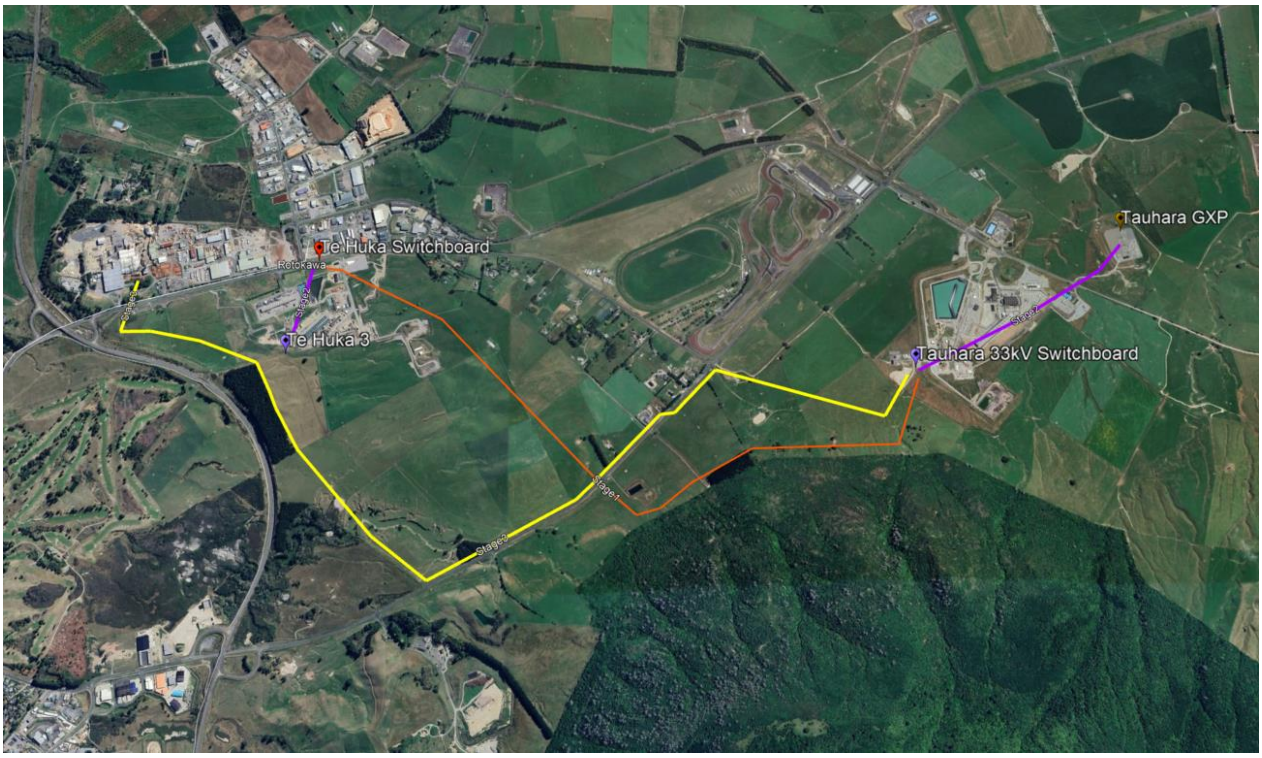
9. Section 54C(2)(c) excludes from "electricity lines services": *"conveying electricity (other than via the national grid) only from a generator to a local distribution network or from a local distribution network to a generator:…"*. The dedicated assets which convey electricity between the Te Huka 3 power station and Unison's network are *not* part of this reopener application.

10. The application relates to the total contracted value of $5.766 million for Unison's distribution assets connecting the Te Huka 3 Power Station to the national grid.

11. The figures below show:
    a. A Google Earth depiction of the asset locations in Taupō.
    b. Network Schematic showing the Tauhara Project and Te Huka 3.

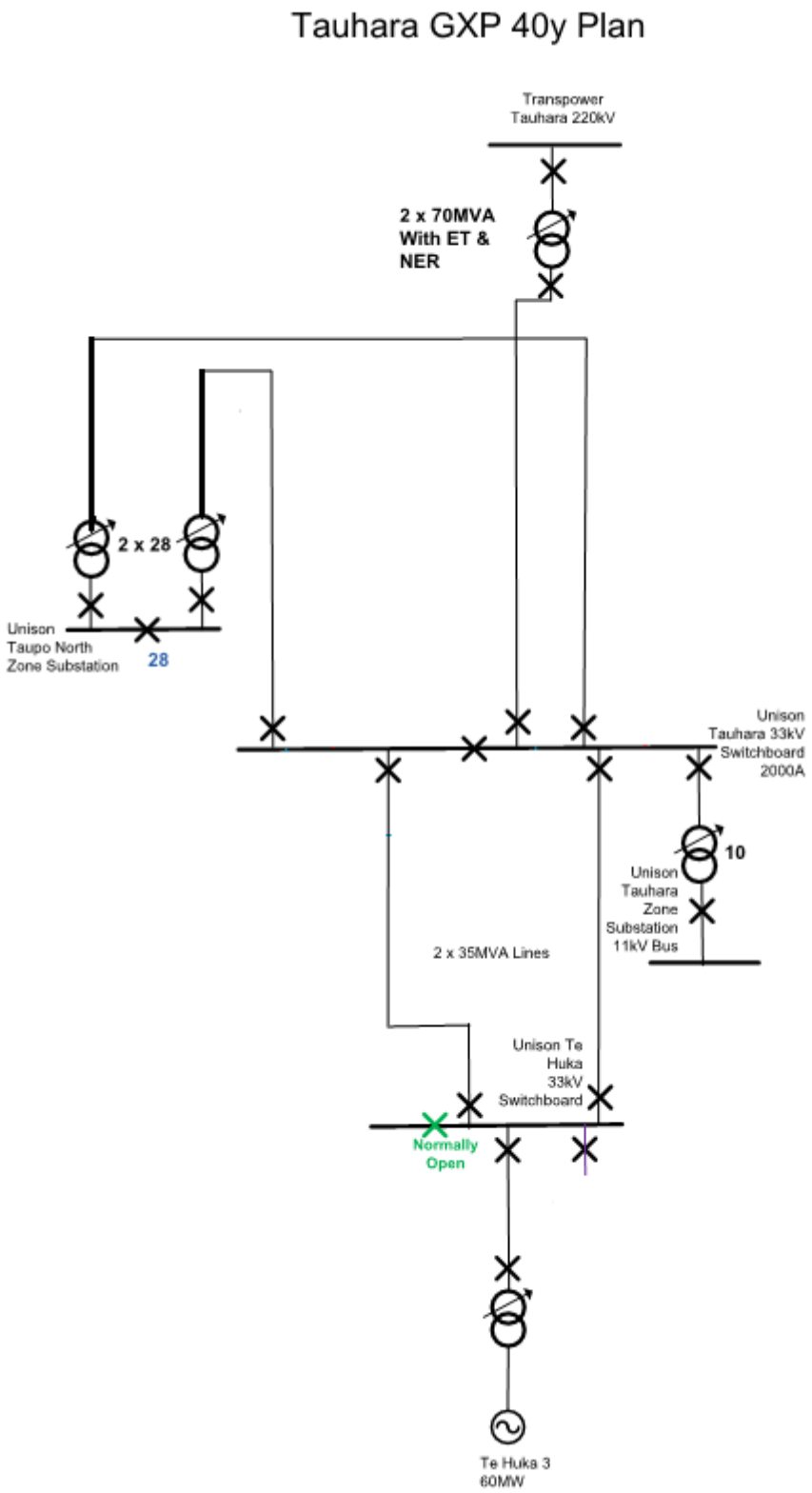
12. The purpose of the diagrams is to illustrate the new connections between the assets constructed as part of the Tauhara project (subject to the approved reopener application) and the Te Huka 3 Project, the subject of this application. The Google Earth image also signals a third intended reopener application in DPP3 that relates to an upcoming customer who will connect to assets built for the Te Huka 3 Project and previous Tauhara project for supply of a large 18MW factory.

Figure 1: Google Earth image illustrating Taupō unforeseen major capex projects in DPP3
(Stage 1, 2 and 3 represent three separate projects which connect)



Key:	Orange	Stage 1 Tauhara Project
	Purple	Stage 2 Te Huka 3 Project
	Yellow	Stage 3 New Customer Project

Figure 2: Tauhara GXP connections showing the Tauhara Project and Te Huka 3 Project
The connection UNL is building for the Te Huka 3 Project is to convey 60MVA. The GXP is able to convey 70MVA (but is constrained by the 60MVA supply of the power lines)



Reasonable exclusion in 2019 Asset Management Plan

13. Unison's 2019 Asset Management Plan did not include any allocation of costs relating to construction or maintenance of the new assets required to connect Contact Energy's Te Huka 3 Geothermal Power Plant to the national grid.

14. The Te Huka 3 Project was reasonably excluded from the 2019 Asset Management Plan and "unforeseen" consistent with cl 4.5.5A of the Input Methodologies Determination.

15. As stated in Unison's Tauhara reopener application, Unison's 2019 Asset Management Plan forecast was subsequently used as the basis for capital expenditure in DPP3. This was finalised in late 2018. In line with normal expected practices, the forecasting data for customer connection capex reflected the best available knowledge of upcoming new connections activity at the time of preparation.[1]

16. In this development and finalisation period, Unison was aware that Contact Energy was considering the possibility of a second new geothermal power station near Taupō (in addition to Tauhara). Contact had made no commitment to Unison it was proceeding, and no firm enquiry for a new distribution connection. In late 2018, the concept of a second new geothermal power station was understood to be less certain and earlier in Contact Energy's considerations than the Tauhara project.

17. Unison deemed it appropriate and consistent with good forecasting practice *not* to make provision for this project within the 2019 AMP, because:
    a. Contact Energy had not made any firm commitment to proceed with its project or any firm enquiry for a new connection; and
    b. There was reasonable uncertainty that Te Huka 3 would:
        i. be further considered by Contact Energy;
        ii. start construction in the DPP3 regulatory period exacerbated by the potential closure of the Tiwai smelter; and
        iii. receive power from Unison's distribution network (because power stations can generate their own electricity for operations) and connect directly to the national grid.

Capital contributions sufficient and consistent with Capital Contributions Policy

18. Unison's application of its Capital Contributions Policy to Contact Energy for the Te Huka 3 Project is sufficient and consistent, including with the circumstances of the Tauhara project.

19. Unison consistently applied its policy as per the bellow:
    a. No capital contribution was required as Contact Energy is considered a financially strong counter party.
    b. This is consistent with its capital contributions policy which entitles Unison to approach capital contributions for large projects on a case-by-case basis.
    c. Unison's policy on capital contribution from connecting parties is discretionary. The policy states that:
        i. Unison reserves the right to review customer connection projects and associated capital contributions on a case-by-case basis;
        ii. Unison may require its customers to pay a capital contribution when they request a new or altered connection to its electricity distribution network; and
        iii. the capital contribution required will be calculated based on the net present value (**NPV**) of the project. This includes all associated costs and revenue streams over an appropriate period. A negative NPV indicates the investment would be uneconomic for Unison, therefore a capital contribution payment is required from the customer.
    d. Unison also considered the following matters when applying its capital contribution policy:
        i. Unison is managing its commercial risk via a contractual arrangement with Contact Energy. Unison considers that in a situation of a large, financially strong counterparty, it makes sense to spread the entire project cost over the life of the

[1] Unison Networks application to reopen the price-path, Unison-Networks-Limiteds-application-to-reopen-its-default-price-quality-path-Public-version-29-June-2021.pdf (comcom.govt.nz), pg 2.

contract, as Unison has no need to manage any financial default risk or stranded asset risk through an up-front capital contribution.

ii. This is a non-standard connection to the network because it is a connection into the network for back-up supplies and for operating the power station. No standard price applies, so Unison must determine a combination of revenues from prices and capital contribution.

iii. In other complex projects (eg, a subdivision) the long-term revenues from prices would be generated from standard published prices, in which case the capital contribution is derived from the difference between the project cost and the NPV of revenues from standard prices.

iv. Contact Energy requested supply of 60MW which the Te Huka 3 Project provides. Given the large generation load and ability for the same assets to convey load to future customers, in addition to the national grid, Unison considered mechanisms that would enable Contact to benefit if future customers connected to the new assets.

Project reflects efficient costs

20. Contact Energy could have connected to the national grid directly, bypassing use of the distribution network. The competitive process tested the value to both Contact Energy and Taupō customers of utilising the distribution network because:
    a. Contact Energy will be able to share costs with any future connecting customers (allocated by portion of the use of the asset); and
    b. Future connecting customers will gain the benefit of the assets built by Contact Energy and Unison alongside the cost of sharing their use of the asset with Contact Energy.

Project Timeline

Project step	Delivery date
Detailed design	Complete
Contract signed	Complete
Construction commences	Ongoing
Reopener application submitted to the Commerce Commission	May 2024
Commission approves application and reopens DPP3	TBC
Assets commissioned	**Expected June 2024**

Reopener criteria

21. The following table sets out the requirements of the reopener provisions set out in the Input Methodologies clauses 4.5.5A, 4.5.6 and 4.5.7:

Clause	IM Determination Criteria[2]	Project detail Te Huka 3	Supporting evidence in the Application and appendices
4.5.5A	**Unforeseeable major capex project**		
(a) – (d)	Primary driver	Meets (a) Connection Capex because the new connection point relates wholly to the supply of the 60MW requested by the customer Contact Energy.	Project background, paras 8 to 12, Appendix One Commitment letter, Appendix Three [redacted]
(e)	Capex forecast - project included?	No provision for the Te Huka 3 Project included in the 2019 Asset Management Plan (and DPP3).	Project background, Reasonable exclusion in 2019 Asset Management Plan paras 1 - 17, 2019 Asset Management Plan, available here: unison-regulatory-asset-management-plan-update-2019.pdf
(f)	Reasonableness of exclusion	Reasonable uncertainty existed when the 2019 Asset Management Plan was developed and confirmed because the customer had made no firm enquiry.	Reasonable exclusion in 2019 Asset Management Plan paras 13 to 17 and 2019 Asset Management Plan (link above).
(g)	Capital contribution to be received sufficient and consistent with policy	• Nil contribution. • Sufficient and consistent with Unison's capital contributions policy, which provides that Unison approaches capital contributions for large projects on	Application paras 18 to 19 and Appendix Two Capital Contributions Policy.

[2] Subpart 5, Clauses 4.5.5A, 4.5.6, 4.5.7 - Electricity Distribution Services Input Methodologies Determination 2012 (Consolidated 20 May 2020).

Clause	IM Determination Criteria[2]	Project detail Te Huka 3	Supporting evidence in the Application and appendices
		a case-by-case basis.	
(h)	Material value of commissioned assets	Exceeds $2M ($5.766M)	Appendix Three
(i)	Connecting party confirmation	An authorised officer of Contact Energy has confirmed its commitment to the Commission.	Appendix One Letter from Contact Energy.
(j) – (l)	Criteria for projects driven by system growth, relocation or a combination of connection capex and system growth capex.	N/a: because the primary driver is Connection Capex. The large connection request was for supply of 60MW which is provided by the Te Huka 3 Project.	Project description paras 4 – 12.
(m)	Apportionment of additional revenue	Additional revenues will be recovered according to the contract with Contact Energy.	Appendix Three
4.5.6(4)/(5)	**When price-path quality paths may be reconsidered**		
(4)	Total forecast value of commissioned assets of eligible projects in a disclosure year exceeds $30 million	Confirmed (forecast commissioned value: $5.766M). There have been no other reopener applications applied for in the relevant disclosure year.	Application, paras 1 to 7. Appendix Three
(5) (a) (b)	Net value calculation for (4) above disregards: capital contributions; and previously provided amounts	Calculation basis confirmed: - contributions: nil - previous values: nil.	Reasonable exclusion from 2019 Asset Management Plan, para 13.
4.5.7(3)	**Amending price-path after reconsideration**		
(3)	Project amount reflects efficient costs	Contracted via competitive market engagement, by customer experienced in similar construction contracts.	Project reflects efficient costs, para 20. Appendix Threeunfore

Clause	IM Determination Criteria[2]	Project detail Te Huka 3	Supporting evidence in the Application and appendices
		Utilising the local distribution network benefits Contact Energy and future connecting customers who will share the costs of using the assets.	

Impact on the price-path

22. The table below applies the 2019 financial model released by the Commission,[3] updated with the adjustments made by the Commission's 2022 Amendment Determination. [4]

23. The BBAR as at March 2022 is 48,041 and is adjusted to include the Te Huka 3 assets commissioned to $53,807 (with a difference of additional assets commissioned of $5,766m).

Year	Commissioned assets March 2022 Determination	Commissioned assets April 2024	Difference	FNAR March 2022	FNAR April 2024	Difference
2020/21	46,746	46,746	0	100,019	100,019	–
2021/22	54,653	54,653	–	102,231	102,231	–
2022/23	55,713	55,713	–	104,301	104,301	–
2023/24	46,852	46,852	–	106,387	106,387	–
2024/25	48,041	53,807	5,766	108,515	108,655	140
				521,453	521,593	140

BBAR March 2022	464,456
BBAR April 2024	464,600
Difference	144

24. We look forward to progressing this with the Commission.

Ngā mihi

Rachael Balasingam
Regulatory Manager

Appendices:
Appendix One: Contact Energy confirmation of commitment to the Te Huka 3 Project
Appendix Two: Capital Contributions Policy in place 14 April 2022 to 24 October 2023
Appendix Three: CONFIDENTIAL
Appendix Four: CONFIDENTIAL
Appendix Five: CONFIDENTIAL

[3] EDB Financial Model DPP3 Final Determination 27 November 2019.
[4] Electricity Distribution Services Default Price-Quality Path (Unison unforeseeable major capex project) Amendment Determination 2022 [2022] NZCC 2.

Appendix One: Contact Energy confirmation of commitment to Te Huka 3 Project

7 May 2024

Commerce Commission
PO Box 2351
Wellington 6140

To whom it may concern,

Te Huka 3 Power Station - Distribution Network connection

Contact Energy confirms it is constructing the new Te Huka 3 Geothermal Power Station, near Taupo. Contact Energy confirms it is committed to this project. Contact Energy requires services from Unison Networks to ensure the conveyance of electricity from the Power Station to the national grid via the Tauhara Grid Exit Point.

Yours sincerely

[redacted]

Gerard Demler
Transmission Manager

Appendix Two: Capital Contributions Policy in place 14 April 2022 to 24 October 2023

FC0021
Capital Contributions Policy

Issue Version Number: 7.0

Data Classification: Public

Published Date: 14/04/2022

Next Review Due: 31/03/2024

©2022 Unison Networks Limited

This is an approved controlled document and is subject to change.
Please ensure you have the most up-to-date copy at all times.
Contact the Commercial Group for the latest version.

FC0021 Capital Contributions Policy

Overview

Document status	Draft ☐ **In Service** ☒ Under Review ☐ Archived ☐
Document purpose	The purpose of this policy is to provide a description of any potential capital contribution required by Unison Networks Limited ('Unison') when a customer requests: • a new or modified connection to Unison's electricity distribution network, or • the relocation of network assets. This policy meets the requirements of section 2.4.6 of the Electricity Distribution Information Disclosure Determination 2012.
Application	This policy applies to all Customer Connection Projects and customer requested relocation of network assets undertaken by Unison.
What is covered in this policy	This policy covers: • the capital contributions a customer is required to make for the provision of: – Network Connection Points – System Network Extensions – Network Connection Point Upgrades – Network Connection Point Downgrades – Relocation of Network Assets – Overhead to Underground Conversion (OHUG), and – Reticulation of New Subdivisions • the general rules that apply to Customer Connection Projects in respect of Unison's system network. **Note** Unison reserves the right to vary terms and conditions on a case-by-case basis at its sole discretion.
Intended audience	This policy applies to all Unison customers.

Document contributors

Contributors	Name and Position Title	Approval Date
Creator	Jason Larkin Commercial Manager	31/03/2022
Authoriser	Nathan Strong General Manager – Commercial	31/03/2022
Approver	Ken Sutherland Group Chief Executive	12/04/2022

Key dates

Published Date 14/04/2022
Next Review Date 31/03/2024

Renewal period – 2 years

Related references

Legislation

- Electricity Act (1992) and Amendments
- Electricity Distribution Information Disclosure Determination 2012

Unison Policy

- CM0001 Pricing Policy and Schedules Policy

Clarification

Clarification of any matter referred to in this document should be directed to:

Commercial Manager
Unison Networks Ltd
PO Box 555
HASTINGS 4156

Or

1101 Omahu Rd
HASTINGS 4120

Ph (06) 873 9300 Fax (06) 873 9311

Communication

Unison's Customer Delivery Team will receive and manage customer requests about a Customer Connection Project and submit the project details for determination of the capital contribution in accordance with this policy. Communication with customers regarding the capital contribution will make reference to this policy and the accompanying procedures.

Content

This document contains the following topics:

Topic	See Page

Definitions/Abbreviations

Augmentation	The enhancement of electrical distribution assets for the distribution or associated with the distribution of electricity. These enhancements are to: • meet projected system demand, and • maintain network performance in accordance with the requirements of the Electricity Act (1992).
Capital contribution	Capital funding required from the customer for Unison to be able to: • undertake the works associated with the Customer Connection Project, and • achieve an economic rate of return on the project or projects.
Consumer	The person who is responsible for the energy consumed at the Network Connection Point.
Cost of capital	The opportunity cost of the funds employed as a result of an investment decision. The rate of return that a business could earn if it chose another investment with equivalent risk.
Customer	A party (person, persons, trust, corporation or company), or agent thereof, who requests Unison to undertake a Customer Connection Project.
Customer Connection Projects	Projects that require capital expenditure predominantly associated with undertaking work associated with customer requests to: • establishing new Network Connection Points • making alterations to the existing Network Connection Points including Upgrades and Downgrades • relocating network assets • reticulation of new subdivisions, and • network extensions required in association with undertaking any of the above.

Downgrades	Customer requests to reduce the capacity of network connection(s) and associated delivery charges. This reduction is through the replacement of existing electrical distribution assets, with assets of a lessor capacity within the existing system network for the distribution or associated with the distribution of electricity including but not limited to fuses, fuse holders, and distribution transformers.
Electrical distribution assets	Electrical distribution assets include lines, cables, transformers or additional switch gear.
Extension	The addition of electrical distribution assets to enable distribution or associated with providing a Network Connection Point or subdivision reticulation at a specified location.
Network Connection Point	The point on the system network where the consumer is connected. In most situations this is also the point where the responsibility for the equipment that conveys electricity transfers from Unison to the consumer.
Network reticulation	The provision of electrical distribution assets for the distribution or associated with the distribution of electricity within the existing system network.
Network service zone	The area defined for the purpose of service levels and pricing in respect of urban and rural customers as detailed on Unison's website www.unison.co.nz.
OHUG	Overhead to Underground (OHUG) conversion – is the relocation and replacement of overhead distribution assets to underground and ground mounted assets. These assets are used for the distribution or associated with the distribution of electricity within the existing system network.
Project costs	All costs relating to the Customer Connection Project.
Rural	Network service zone in Unison's network coverage area deemed to be part of Unison's rural network as published on Unison's website. This is for the purpose of service levels and for determining the applicable capital contribution rate for standard connections.

Standard connections	Single residential, general and small commercial connections to the existing network: • within 30 metres of the existing low voltage or 11 kV distribution network • located in road reserve or where easements in favour of Unison are provided and • constructed using standard designs and equipment for the connection location.
Substation	Transformer and associated fittings including switchgear, earthing, protection, structure and foundations, and all connections made to them.
System network	The existing electrical distribution assets owned or operated by Unison Networks Limited for the distribution or associated with the distribution of electricity to end consumers.
Unison	Unison Networks Limited trading as Unison.
Upgrades	Works undertaken to increase the capacity of a Network Connection Point including providing additional phases for example from single phase to three phase.
Urban	Network service zone in Unison's network coverage area deemed to be part of Unison's urban network as published on Unison's website. This is for the purpose of service levels and for determining the applicable capital contribution for standard connections.

Policy Statement

2.1 **Statement**

Unison may require its customers to pay a capital contribution when they request a new or altered connection to its electricity distribution network or relocation, OHUG or removal of electrical distribution assets.

Unison reserves the right to review customer connection projects and determine associated capital contributions on a case-by-case basis.

Background

3.1 **Scoping process**

The first step in determining a customer's contribution to reticulate power and connection to a site is specifying a 'fit for purpose' solution. This considers:

- customer's load/demand requirements and number of connections
- specific customer requirements (dedicated solution) including requirement for relocation, OHUG or removal of electrical distribution assets.
- non-standard customer requirements (e.g. lower or higher security and reliability), and
- any network augmentation required to meet the customer's load and projected system load.

The next step is to determine the methodology to be applied to determine the capital contribution based on whether the proposal is a standard connection, complex project, (including relocation, OHUG or removal). The following are used in determining the project type and associated capital contribution methodology:

- customer's requirements
- number of connections (if any)
- change to connection capacity
- relocation, OHUG or removal of assets
- the solution specified, and
- proximity to the existing low voltage or 11 kV distribution network.

3.2 **Standard connection process**

The capital contribution for a standard connection is priced at a standard unit rate (standard capital contribution) depending on the connection type and location. Refer to *Appendix A* for Unison's standard capital contribution rates valid prior to 1 April 2022. Refer to Unison's pricing information published on its website for rates effective after this date.

3.3 **Complex project process**

In the case of complex projects in some cases the required works could include an extension of the network (including network reinforcement), relocation, OHUG, or removal of electricity distribution assets.

Unison will provide an initial estimate of the:

- total costs of the project, and
- capital contribution required to be paid by the customer.

If the customer decides to proceed to the detailed design stage and pays the required capital contribution pre-payment:

- a detailed design will be completed, and
- a quote will be provided to the customer. It will detail the:
  - scope of works to be undertaken
  - capital contribution required to be paid by the customer
  - other requirements or conditions including if an easement is required from the customer and any preparatory works required to be undertaken by the customer, and
  - price category or delivery charges that will apply for any new or upgraded/downgraded connection.

In accepting the project design and quoted price, the customer enters into a contract with Unison. This means the customer agrees to pay the capital contribution toward the project and satisfy any other requirements or conditions.

Unison may determine an agreement is required with the customer for establishing the assets, payment of delivery and investment charges and any terms of service such as through a Works Agreement or Line Function Service Agreement. This will be based on the:

- level of investment required, and
- investment risk profile associated with a Customer Connection Project.

This agreement may include:

- an investment charge,
- other delivery charges including network or transmission charges, and
- a termination payment schedule to protect Unison's future revenue stream associated with the Customer Connection Project.

These charges and payment schedule are determined based on the 'level of investment, the applicable cost of capital' of the project and usage of the upstream distribution and transmission networks.

Customer Obligations

4.1 **Customer obligations and requirements**

Customers who make an application to Unison must satisfy all the obligations listed in the table below. They must also comply with all the requirements listed.

Obligations	Requirements
Easement	Provision of easements as applicable.
Vegetation	Clearance and ongoing management of vegetation as applicable.
Statutory Requirements and Issues	Compliance with statutory requirements and issues as applicable.
Site access	Provision of safe access to site.
Site preparation	Timely completion of all preparatory works
Retailer	Agreement(s) with retailer(s) for supply of energy to all ICPs.
Connection standards	Compliance with Unison's Network Connection Standard for all ICPs.
Capital Contribution	Payment of the capital contribution in accordance with the payment terms. These requirements and obligations are described in *Section 5* of this policy.

Table 1 – Obligations and Requirements

4.2 **Provision of information**

The customer will be required to provide all the necessary information to enable:

- a detailed design
- a construction plan, and
- an estimation of consumption and demand for ICPs associated with the customer project.

Capital Contribution

5.1 Level of capital contribution for a new investment

Unison will own the electrical distribution assets installed in association with the Customer Connection Project. The customer will be requested to make a capital contribution. The level of capital contribution required is based on the project meeting the required rate of return for the investment, in line with Unison's 'Cost of Capital'.

Projected incremental future revenue is based on the applicable price category and price options from all ICPs associated with the project. For a project investment to be economic, future revenue must cover:

- the cost to operate and maintain any proposed new extension (including indirect administration costs), and
- an appropriate share of the cost to operate and maintain electrical distribution assets upstream from the Network Connection Point. This approach ensures existing customers are no worse off following the connection of a new user. As the expected network revenue from the new customer (in the form of additional charges and/or capital contribution) will cover the incremental cost of supply.

The capital contribution required will be calculated based on the net present value (NPV) of the project. This includes all associated costs and incremental revenue streams over an appropriate period. A negative NPV indicates the investment would be uneconomic for Unison, therefore a capital contribution payment is required from the customer. In instances where there is no incremental revenue (for example relocation, OHUG or removal), or a decrease in revenue associated with a Downgrade, the capital contribution may be equal to 100% of the project costs.

Unison's price schedule containing delivery prices for each price category and price option can be found on Unison's website www.unison.co.nz.

5.2 Formula for calculating contribution

The following general approach is used to determine the level of contribution required for a project or projects:

+ Investment in the customer initiated project or projects
+ Present value (PV) of maintenance and operating expenditure
= Total Costs

– PV of future revenue streams projected from customer (post tax and costs)
– Equipment salvage value (if any)
= Customer Contribution

For standard connections the capital contribution rate reflects the average contribution required for these types of connections as outlined in *point 5.3*.

5.2 Formula for calculating contribution (cont)

For urban greenfield residential subdivisions, the capital contribution toward subdivision reticulation may be priced as a standard per lot rate. This reflects the average contribution for these types of projects as outlined in *point 5.3*. The cost of network extension and providing network security to connect subdivision reticulation to the existing network must be met in full by the customer as part of the capital contribution. This includes items such as 11 kV cabling and switches.

Should another customer connect to the network at a point established previously as a Customer Connection Project, the first initiated customer will not be entitled to any refund.

Generally only electricity distribution assets that can be economically recovered, refurbished and reused in accordance with our asset management practices, such as distribution transformers, are eligible for equipment salvage value.

5.3 **Types of Customer Connection Projects**

Unison applies the following distinction for Customer Connection Projects:

- Standard Connections (Unit Rate Projects),
- Urban Residential Greenfield Subdivisions, and
- Complex Projects.

5.4 **Unit Rate projects**

Standard connections for up to two residential new connections to the existing network:

- require a single or two phase 60 Amp, or 3 phase 40 Amp connection, and
- are eligible for Unison's residential price categories, low user (M11, TLU), standard (M12, THU), or
- are eligible for Unison's non-permanent residential price category (DNR).

Standard connections up to two small general new connections to the existing network:

- require a single or two phase 60 Amp, or 3 phase 20 Amp connection, and
- are eligible for Unison's general price categories (NDL, NDH and TCU).

Standard connections up to two small commercial new connections to the existing network:

- require connections up to 3 phase 100 Amp connection, and
- are eligible for Unison's small commercial price category (MC1).

Eligibility for different price categories is detailed in Unison's Pricing Policy available on Unison's website www.unison.co.nz.

5.5 **Urban Residential Greenfield Subdivision**

Unison may at its discretion assess the capital contribution associated with urban residential greenfield subdivisions based on a standard per lot rate (Unit Rate Project).

Urban residential greenfield subdivisions are defined as subdivisions zoned urban residential with multiple lots that require a single network connection to be established for a residential dwelling at each lot which also must have street frontage designated as road reserve.

Refer to *Appendix A* for Unison's standard capital contribution rates including for urban residential greenfield based on a standard per lot rate. These are valid until 31 March 2022. Refer to Unison's pricing information published on its website for rates effective after this date.

The cost of any network extension or providing network security to connect subdivision reticulation to the existing network must be met in full by the customer as part of the capital contribution. This includes items such as 11 kV cabling and switches.

The cost of any existing network assets requiring relocation, OHUG, or removal must be met through a capital contribution determined in accordance with the approach for complex projects.

5.6 **Determining rates – Unit Rate Projects**

In determining this approach and setting the level of the capital contribution rates, consideration has been given to the principles listed below.

- There should be equity in the allocation of the cost of connection among smaller consumers with similar requirements. The specific cost associated with each connection relates to the provision of the network connection service. Although the actual cost for establishing a connection is dependent on the specific situation, the administrative cost of calculating a specific price for most small connections would make it cost prohibitive.

- A further consideration is that actual costs depend on many variables. For example:

  - which side of the street the existing network is located

  - the availability or not of capacity in an existing distribution transformer, and

  - the availability or not of a point of connection.

These are factors that are a function of network topology. They cannot be reasonably foreseen by a customer wanting to connect to the low voltage network. Therefore, site specific costs should not be allocated to the individual customer. Rather, standard capital contributions rates should be set at a level ensuring this group of smaller customers contribute sufficiently to the costs of standard connections in aggregate. This will ensure an economic return on the total investments associated with providing standard connections. At the same, the level of standard capital contributions rates should be sufficient to ensure other existing network customers are not burdened with meeting part of these costs.

5.6 Determining rates– Unit Rate Projects (cont)

- The level of standard capital contributions rates is determined based on the average contribution required from customers requiring standard connections toward the average cost of establishing these. This ensures Unison receives an economic return at its regulated cost of capital. This level of contribution is reviewed periodically. This review is based on the prevailing cost levels and average revenue per customer for a given standard connection type in prior years.

- A standardised unit rate approach to pricing standard connections reduces administrative costs associated with administering the pricing of the capital contribution requirement for each standard connection project individually. This ensures Unison is delivering efficiency in the cost of connection and providing service to customers.

- A distinction is made between the rate for urban and rural connections. This reflects the:

  - additional cost in mileage and travel time associated with establishing rural connections, and

  - greater requirement for the establishment of new assets including poles and transformers in a rural situation. Whereas, in an urban situation the existing distribution infrastructure is in many cases sufficient or requires limited new assets such as a set of fuses or a new pedestal only.

Note
These standard rates for residential and small commercial connections do not apply where an extension to the network is required to provide a connection. For example, more than one pole must be established, or an extension greater than 30m to the existing network is required. In these instances, Unison's policy for capital contributions to 'Complex Projects' applies.

5.7 **Complex projects**

Complex projects are all works that are not standard connections. For example, subdivisions, large connections, upgrades of network connection capacity, and network asset relocations, OHUG or removals.

5.8 **Determining rates – Complex Projects**

The capital contribution required will be determined based on the net present value (NPV) of the project. This includes all associated costs and revenue streams over an appropriate period according to the formula in *point 5.2*. A negative NPV indicates the investment would be uneconomic for Unison. Therefore, a capital contribution payment is required from the customer. The factors listed below are also considered when determining the Customer Connection Project NPV and capital contribution required.

The value of any deferral of planned and budgeted renewal expenditure foreseen in the immediate planning period associated with the early replacement of existing assets due to customer initiated work will be determined and taken into consideration.

5.8 Determining rates – Complex Projects (cont)

- Equipment salvage value associated with electricity distribution assets that can be economically recovered, refurbished and reused in accordance with our asset management practices, such as distribution transformers, are eligible for equipment salvage value.
- Timeframe and rate of future connections projected as part of the project considering:
  - market conditions
  - build timeframes, and
  - urban/rural subdivision.

  Timeframes used are based on actual experience over an extended period. As a guide, connection uptake for rural residential subdivisions will generally be phased over ten years and urban residential subdivisions over five years.
- Where significant upgrade of Unison's network is required to accommodate additional load, Unison will deduct associated network general costs from the total cost of the Customer Connection Project where this upgrade provides significant benefit to other existing or future network customers. The purpose of this is to determine the capital contribution required toward the upgrade. Network general costs are the proportion of costs associated with providing the increased capacity that existing and future upstream customers will benefit from.
- A proportional share of existing upstream assets, based on the maximum anytime or peak loading on network assets, will be included in the total Customer Connection Project value. This value may be used for determining the capital contribution required and/or any network delivery charges.

Unison incorporates a minimum capital contribution in its incremental profitability assessment. This discourages 'inefficient' investment by exposing new connections to a portion of the financial cost of the works. It also incentivises new connections to size their connection appropriately to minimise the cost of augmentation.

The minimum capital contribution will consider the non-recoverable incremental project costs. Generally, non-recoverable incremental project costs are equivalent to the value of assets physically or economically not able to be re-deployed in the event the new connection no longer requires them.

5.9 **Augmentation of system**

Where Unison determines augmentation is advantageous to Unison, Unison will:

- identify the level of benefits, and
- determine an appropriate cost split between Unison and the customer.

5.10 **Special enhance-ments**	Where a customer's Network Connection Point requires special enhancements, the cost of these enhancements must be met by the customer through a capital contribution.
5.11 **Downgrades**	Where a downgrade is requested the full cost of the downgrade including the alteration, replacement or removal of any network assets must be met by the customer through a capital contribution.

Embedded Networks

6.1 **Capital contribution methodology for Embedded Networks**	The capital contribution associated with the establishment of embedded network is determined using the principles and process for complex projects. For the avoidance of doubt, an embedded network that is incorporating or amalgamating existing ICPs will be treated as a downgrade.

Fuse Requirements

7.1 **Requirements**	If upon livening a Customer Connection Project it is identified the actual customer demand requires a variation to the connection capacity through an increase in fusing, Unison may make an adjustment to the required contribution. The customer must pay any additional contribution associated with this.

Roading Authorities

8.1 **Obligations**	Unison ensures it meets all its obligations in relation to undertaking network asset relocations at the request of Roading Authorities including the determination of capital contributions toward the costs. These obligations are described in the Electricity Act 1992 and subsequent amendments.

Relocation of Network Assets

9.1 **Obligations**

Unison will accommodate the relocation of existing assets where Unison determines relocation is environmentally sound, prudent and economically viable for Unison.

Unison will determine the capital contribution payable to make the relocation:

- economically viable, and
- consistent with the principles of the apportionment of costs and determining the capital contribution for complex project to reflect the benefits received between Unison and the customer requiring the relocation.

Easements

10.1 **Easements**

Where network assets are to be installed outside of road reserve, Unison requires easements in accordance with its policies. Agreements providing Authority to Grant Easement(s) must be arranged for by the customer and all costs of surveying and registering easements including Unison's legal costs must be met by the customer.

Using Independent Contractors

11.1 **Contractors**

Unison undertakes all Customer Connection Project works and does not permit the use of independent contractors. This ensures:

- Customer Connection Projects are carried out in a cost effective manner that maintains the integrity of Unison's asset standards, and
- asset management strategies which are designed to deliver whole of life value from Unison's assets.

More information on Unison's asset management strategies can be found in Unison's Asset Management Plan available on Unison's website www.unison.co.nz.

Consistency with Pricing Principles

12.1 **Pricing principles**

Unison's approach to determining capital contributions outlined in this policy is consistent with Unison's Pricing Objectives and Principles. These are contained in Unison's Pricing Methodology Disclosure available on Unison's website www.unison.co.nz.

They are consistent with Electricity Authority's and Commerce Commission's pricing principles and are subject to oversight by these industry regulators.

Appendix A – Standard Capital Contributions

Charges – standard connections

Unison has standard capital contribution levels to establish new points of connections to the existing network for residential, general and small commercial customers. The level of these contributions is determined in accordance with this policy and reviewed annually. Listed below are the current capital contributions rates.

Service	Zone	Price Categories	Price
Standard Connection/ Upgrade	Urban	Residential/Distributed Gen	$750+GST
	Rural	Residential/Distributed Gen	$1,500+GST
	Urban	General, Non-Permanent Residential	$2,000+GST
	Rural	General, Non-Permanent Residential	$2,500+GST
	Urban	Small Commercial (MC1)	$4,000+GST
	Rural	Small Commercial (MC1)	$5,000+GST
Urban Residential Greenfield Subdivision Reticulation (per lot)	Urban	Residential/Distributed Gen	$2,400+GST

Appendix B – Summary of Document Changes

Date	Version No.	Changes to Document	Creator	Authoriser	Approver
26/06/2006	1.0	New Policy – Financial Contribution Policy Replaces Internet version v2.4; 030604BB	Commercial Analyst	GM Finance & Commercial	Chief Executive
01/07/2009	2.0	Full Policy review. Definitions and Section 9 rewritten.	Commercial Specialist	Commercial Manager & Chief Financial Officer	Chief Executive
23/05/2013	3.0	Update into new template with minor updating. Point 3.1 and 5.2 updated to exclude reference to tendering process. Point 5.3 updated. Point 6.2 MARIA compliant meters changed to Electricity Authority compliant meters.	Commercial Manager	GM Commercial	Group Chief Executive
06/08/2014	4.0	Full review. Policy updated to include the requirements of section 2.4.6 of the Electricity Distribution Information Disclosure Determination 2012. New definitions added for Capital Contributions, Rural, Urban, Upgrades and Network Service Zones. Addition of point 5.2 – Formula for calculating contribution Addition of new sections: • 6 – Standard Schedule of Capital Contribution Charges • 10 – Using Independent Contractors, and • 11 – Consistency with Pricing Principles.	Commercial Manager	GM Commercial	Group Chief Executive
07/02/2017	5.0	Full review. Updates made throughout policy. Policy Statement amended. Additions:	Commercial Manager	GM Commercial	Group Chief Executive

Date	Version No.	Changes to Document	Creator	Authoriser	Approver
		• Section 9 Relocation of Network assets, and • Appendix A – Pricing schedule for standard connections.			
27/03/2017	5.1	Minor review. Point 5.3 Types of Customer Connection Projects – updated. Appendix A – Standard capital contributions rates updated following annual review.	Commercial Manager	GM Commercial	Group Chief Executive
05/09/2019	6.0	Full review. Point 5.2 – Addition of option for per lot pricing capital contribution required for urban subdivisions.	Commercial Manager	GM Commercial	Group Chief Executive
30/03/2022	7.0	Full review. Updated definition for Customer Connection Projects, Downgrades, Extension, Standard connections, and Upgrades. Revised policy statement. Described the application of the methodology in the scoping process. Added point 3.2 Standard connection process. Updated point 3.3. to clarify complex projects, inclusions of the initial estimate, quote and when an agreement is required with the customer. Customer obligations extended to include the retailer, connection standards, site access and site preparation requirements. Point 5.1 updated to state capital contribution may be equal to 100% of the project costs. Added clause regarding equipment salvage value in points 5.2 and 5.7.	Commercial Manager	GM Commercial	Group Chief Executive

Date	Version No.	Changes to Document	Creator	Authoriser	Approver
		Added points 5.4 and 5.5 regarding Urban Residential Greenfield Subdivisions. Rates reviewed and updated to reflect Urban Residential Greenfield Subdivisions. Added Section 6 – Embedded networks and Section 10 – Easements.			