



NK0003

Electrical Line and Equipment Ownership Policy

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NK0003 Electrical Line and Equipment Ownership Policy

Overview

Document status

Draft ☐In Service ☒Under Review ☐Archived ☐

Document purpose

This document provides guidance to determine the ownership of:

- existing electrical lines and equipment, and
- future new electrical lines and equipment.

Note

This document excludes streetlights, under verandah and metering related assets.

Intended audience

This document applies to all Unison employees and approved contractors.

Document contributors

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Key dates

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Related references

Legislation and Codes

- Electricity Act 1992 ('the Electricity Act')
- Electricity Industry Act 2010 ('the Industry Act')
- Electricity (Safety) Regulations 2010 ('the Service Reg')
- Electricity Industry Participation Code 2010 ('the Participation Code')

Unison Procedure

- NK1002 Unison's Easement Process

Additional Reference

- Safety Manual Electricity Industry (SM-EI) Parts 1, 2 and 3

Continued on next page

Overview, Continued

Content

This document contains the following topics:

Topic	See Page
1. Definitions and Abbreviations	4
2. New Electrical Lines and Equipment	8
3. Existing Electrical Lines and Equipment	13
4. Electrical Line and Equipment Ownership and Information	16
Appendix A – Summary of Document Changes	17

1. Definitions and Abbreviations

Berm	The strip of land between a customer's property boundary and the edge of the carriage way.
Carriageway	Formed road within road corridor.
Customer	Any person who is supplied with electricity from Unison's electrical network.
Easement	<p>An easement instrument granting rights to occupy and access Unison's works granted in favour of either:</p> <ul style="list-style-type: none">• Unison (registered over the landowner's title for property), or• the customer (registered over a third party's title for property).
Easement in gross	An easement instrument granting rights to occupy and access Unison's works granted in favour of Unison (registered over the landowner's title for property).
Electrical equipment	<p>Electrical distribution equipment associated with an electrical line including:</p> <ul style="list-style-type: none">• distribution transformers• switchgear• pedestals• network fusing• earthing systems, and• other such distribution equipment required to supply electricity. <p>Note This excludes metering equipment, metering enclosures, and typically any customer owned equipment past Unison's point of connection.</p>
Electrical installation	<p>Has the same meaning as given in the Electricity Act 1992.</p> <p><i>In relation to a property with a point of supply, all fittings beyond the point of supply that form part of a system that is used to convey electricity to a point of consumption or used to generate or store electricity.</i></p>
Electrical line	Any underground cable or overhead electrical line including supporting structures.

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Definitions and Abbreviations Continued

Electrical operator	<p>An electrical operator can be:</p> <ul style="list-style-type: none">• anybody or person that, immediately before 1 April 1993, was the holder of a licence issued under section 20 of the Electricity Act 1968 and in force immediately before that date, and• any person declared by the Governor-General by Order in Council under Section 4 or 4A of the Electricity Act 1992 to be an electricity operator for the purposes of that Act or any provision or provisions of that Act.
Embedded network	<p>Has the meaning given in the Electricity Industry Participation Code (2010) and subsequent amendments.</p>
Exclusive fittings	<p>Fittings used or intended to be used for the purpose of supplying electricity exclusively to a property. For example, this may include isolation fuses.</p>
Existing works	<p>Means any works constructed before 1 January 1993, and includes any works:</p> <ul style="list-style-type: none">• that were wholly or partly in existence, or• where work on the construction commenced, before 1 January 1993.
GIS	<p>Geographic Information System – a system where geographic information is stored in layers and integrated with geographic software programmes so that spatial information can be:</p> <ul style="list-style-type: none">• created• stored• manipulated• analysed, and• visualised (mapped).
Metering point	<p>The point where equipment is installed to measure energy values computed from digital and/or analog inputs:</p> <ul style="list-style-type: none">• during variable periods, and• dedicated to energy measurement for billing purposes.
New works	<p>New works includes:</p> <ul style="list-style-type: none">• any works constructed after January 1993, and• any maintenance or reconstruction of <i>existing</i> works that goes beyond what is permitted by section 23 in the Electricity Act 1992.

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Definitions and Abbreviations Continued

Ownership agreement An agreement between Unison and a customer or other electrical line or service main owner. The agreement defines and documents:

- the extent of Unison owned electrical lines and electrical equipment located on that customer's premises, and
- the associated responsibilities of both parties.

For the purposes of this policy, an ownership agreement may include:

- a memorandum of understanding (MOU)
- license or lease agreement
- contract for works, or
- any other signed document between Unison and other relevant parties that clearly describes asset ownership and maintenance responsibilities.

Point of connection The point where a customer's service main connects to Unison's network.

Point of isolation The physical location of a device, such as a switch, fuse or link, which enables de-energisation of the connection from Unison's network.

Point of supply Has the same meaning as given in the Electricity Act 1992.

Point of Supply in relation to a property means the point(s) on the boundary of the property at which exclusive fittings enter that property except that:

- if there are both high voltage lines and a transformer owned by the electricity distributor on the property, the point of supply is the point at which electricity from the transformer enters exclusive fittings, or
- if there are non-exclusive fittings on the property, the point of supply is the point at which those fittings become exclusive fittings, or
- if the exclusive fittings on the property are owned by a customer that is a tenant or licensee of the owner or occupier of the property, the point of supply is the point at which those exclusive fittings enter the area leased or licensed by the owner, or
- if there is a specific agreement that any other point on the property is the point of supply, the point of supply is the agreed point.

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Definitions and Abbreviations, Continued

Road corridor	Includes all land from boundary to boundary (including the berm and carriageway).
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Service main	An electrical line (incorporating exclusive phase and neutral conductors), neither owned or maintained by Unison. The line is installed almost always exclusively on private property and conveys electricity between:
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- Unison's network, and
- a single customer's premises.

A service main in the context of this document could include electrical lines after retailer metering.

Works	Everything used, or designed, or intended for use, in or in connection with the generation, conversion, transformation, conveyance, or use of electricity (assets) that are:
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- Unison owned, and
 - maintained forming part of Unison's electricity distribution network, but excludes electrical installations.
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2. New Electrical Lines and Equipment

2.1 Electricity Act 1992 – Treatment of new lines

The Electricity Act provides the statutory basis for the construction of new works within roads. There is no statutory basis for the construction of new works on private land.

Construction and maintenance of works in, on, along, over, across, or under any road, gives Unison as an electricity operator (from time-to-time), the power to construct and maintain works for purposes prescribed in section 24 of the Electricity Act.

This work must comply with any reasonable conditions imposed by the controlling authority that has jurisdiction over the road. This power is not available to persons who are not electricity operators.

2.2 Constructing new works on private land

To protect Unison's ownership and future access rights to new works on private land, a legal easement in gross must be obtained over any land in which works are to be installed. This requirement is for the following reasons:

- the law of fixtures would otherwise regard the works to become part of the land, and therefore the property of the landowner, and
- any arrangement that is not registered on the title to the land will not bind subsequent owners who may ask Unison to remove its works or refuse Unison access to inspect, maintain, operate or upgrade the works.

The procedures set out in **NK1002 Unison's Easement Process** are to be followed where easements are required.

In very limited circumstances, something less than an easement in gross may be deemed acceptable. For example, a DOC concession over conservation land/or Unison may consider rights specified under a lease, or licence to occupy, etc. In these situations, Unison's Operational Asset Manager:

- must be consulted, and
 - will be required to approve any alternative to a registered easement in gross.
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New Electrical Lines and Equipment Continued

2.3 Privately owned lines and equipment on private land

Unison in general does not allow privately owned electrical equipment to be installed:

- on Unison owned poles, or
- within existing or proposed Unison specific easements on privately owned land.

Approval must be gained by Unison's Operational Asset Manager prior to any such arrangement.

Customer service main's may be installed on private land owned or occupied by the customer, landlord or a third party. In these instances, it is the responsibility of the customer to arrange and secure, if deemed necessary, their own access rights which may include an easement. Prior to this occurring, the customer is to be advised, in writing of the risks to the on-going access, and the protection of the service main and associated assets.

2.4 Ownership of, and access to new electrical lines and equipment

Ownership of new electrical lines and equipment is detailed in Table 1. This table determines:

- the requirements to protect Unison's ownership, and
- future access rights of any lines and/or equipment that it owns.

In entering any land to access, inspect, maintain or operate works protected by easements, statutory provisions or other arrangements, the requirements associated with access set out in the easement instrument, relevant legislation or other agreements, must be observed.

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New Electrical Lines and Equipment, Continued

2.4 Ownership of, and access to new electrical lines and equipment (cont)

Location	Equipment	No. of Customers	Ownership	Protection Required
Legal Road Corridor (with the consent of the roading authority)	Electrical equipment, all voltages (Works).	1 or more	Unison	No easement required.
	Electrical lines 11kV and above (Works).	1 or more	Unison	No easement required.
	230/400V electrical lines (Works) including any portion of a service main installed in the road reserve.	1 or more	Unison	No easement required.
	Note The length of any service main in a road reserve is to be kept to a minimum with the shortest and most direct routes to be taken (where practical) from the customer's property boundary back to Unison's point of connection.			
	Note Any structure that supports an electrical line over a legal road corridor (excludes privately owned roads or right of ways) must be owned and maintained by Unison unless: <ul style="list-style-type: none"> • there is an ownership or other agreement/arrangement in place that definitively states or determines Unison does not own or have maintenance responsibilities for the structure (i.e. Chorus owned road crossing pole) and/or electrical line, and • the owner of the line or structure has provided evidence they have the necessary rights and/or consent from the relevant roading authority for the electrical line and/or structure to be installed within the road corridor. 			
	Note All new road crossing poles are to be installed in legal road corridor with any required service main fusing installed on these poles.			

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New Electrical Lines and Equipment, Continued

2.4 Ownership of, and access to new electrical lines and equipment (cont)

Location	Equipment	No. of Customers	Ownership	Protection Required
Land owned by the customer(s)	Electrical equipment, all voltages (Works).	2 or more	Unison	Easement in gross in favour of Unison required.
	Electrical lines 11kV and above (Works).	1 or more	Unison	Easement in gross in favour of Unison required.
	Note In rare instances, a customer may choose to own 11kV electrical lines and/or equipment which could include distribution transformer(s), switchgear and associated electrical equipment feeding only one customer. This requires an ownership agreement.			
	230/400V electrical lines.	1	Customer Owned Service main	No easement in gross in favour of Unison required. The line owner is responsible for obtaining any necessary consents and easements as required.
		2 or more	Unison	Easement in gross in favour of Unison required.
	230/400V electrical lines supplying one customer that is under built on Unison owned structures supporting overhead 11kV or 33kV electrical lines.	1	Unison	This requires the approval of Unison's Operational Asset Manager, and if granted an easement in gross in favour of Unison will be required.
	Note This excludes 230/400V sub-circuits downstream of metering which would not be permitted to be under-built on Unison owned structures supporting overhead 11kV or 33kV electrical lines.			

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New Electrical Lines and Equipment, Continued

2.4 Ownership of and access to, new electrical lines and equipment (cont)

Location	Equipment	No. of Customers	Ownership	Protection Required
Land owned by some other person or body other than customer(s) or landlord (including right of ways, council parks and reserves)	Electrical equipment (Works).	2 or more	Unison	Easement in gross in favour of Unison required.
	Electrical lines 11kV and above (Works).	1 or more	Unison	Easement in gross in favour of Unison required.
	Electrical lines 11kV and above (Works) where the line passes through another landowner's property and then traverses through a road corridor to reach the customer's property.	1 or more	Unison	Easement in gross in favour of Unison required over all privately-owned land.
	230/400V electrical lines.	1	Unison or Customer	If electrical line is to be Unison owned works, an easement in gross in favour of Unison is required. This is to be negotiated and secured by the customer. Alternatively, with the agreement of the customer, an easement between the customer and other landowner(s) is required if the line is passing through third-party land, and the line is to be deemed a service main.
		2 or more	Unison	Easement in gross favour of Unison required over all privately-owned land.
	230/400V Electrical lines (Works) where the line passes through another landowner's property and then traverses through a road corridor to reach the customer's property.	2 or more	Unison	Easement in gross favour of Unison, required over all third-party, privately-owned land.
	Note In some instances, a customer may choose to own 11kV electrical lines and/or equipment which could include distribution transformer(s), switchgear and associated electrical equipment feeding only one customer. This requires an ownership agreement.			

Table 1 – Ownership of New Works

3. Existing Electrical Lines and Equipment

3.1 Electricity Act 1992 – Treatment of existing lines

The Electricity Act protects existing works that were in or partly in existence on 1 January 1993.

Determining ownership of electrical lines built on private property before 1 January 1993 can be challenging as the statutory basis for ownership responsibility changed several times between 1927 and 1993. Any electrical lines built since 1993, (other than low voltage service main's supplying a single customer) are likely to belong to Unison, unless there is an ownership agreement between the parties. Where there is no easement in favour of Unison for 11kV lines constructed after 1993, these may be customer owned. However, there are instances where Unison owned works were installed post 1993 within private property, but easements were not registered at the time.

Due to the multitude and complexity of some legacy installation and connection practices, it is acknowledged this policy, and existing ownership information may not adequately define or clarify all existing situations i.e. multi-story apartments and multi-tenanted shops.

The following queries are to be referred to the Operational Asset Manager where there is ambiguity:

- ownership cannot easily be determined, or
- where customers do not agree with Unison determination of ownership.

3.2 Customer's responsibility

In most cases, the section of a single customer's 230/400V service main past the point of isolation (network fuses), used exclusively to supply an end customer and located on the end customer's private property, will be owned by that customer.

3.3 Maintenance responsibility

To ensure compliance with provisions contained within Unison's Public Safety Management System, Unison has assumed maintenance responsibilities for most 11kV electrical lines and equipment connected to its network. This includes some lines and equipment that may be privately owned, but are not currently covered by an existing ownership agreement.

This maintenance responsibility will continue until an ownership agreement has been established with the electrical line stakeholder/owner for any specific, individual electrical line.

3.4 Guidelines to assist in determining ownership

Unison has developed some guidelines to assist in determining ownership/maintenance responsibilities of existing electrical lines and electrical equipment. These guidelines are based on the interpretation of historic statutory frameworks and policies followed by Unison, and its predecessors. These guidelines are outlined in *point 3.5*.

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Existing Electrical Lines and Equipment, Continued

3.5 Ownership and maintenance responsibilities of existing works

Unison has developed the following table to assist in determining the ownership of existing works and current maintenance responsibilities.

In entering land to access works protected by easements, statutory rights or any other agreements, the provisions around access set out in the relevant documents (i.e. easement instrument, Electricity Act, ownership agreement or other legislation etc) must be observed and followed.

Location	Equipment	Pre 1993 Ownership	Post 1993 Ownership	Current Maintenance Responsibility
Legal Road Corridor (with the consent of Roding Authority)	Electrical equipment, all voltages (Works).	Unison	Unison	Unison
	33kV electrical sub-transmission lines (Works).	Unison	Unison	Unison
	11kV and 230/400V electrical distribution lines (Works) including any portion of any service main installed in the road reserve.	Unison ¹	Unison ¹	Unison ¹
Private land	Electrical equipment (Works), on private land, serving two or more customers.	Unison	Unison ^{2,3}	Unison ^{2,3}
	33kV electrical sub-transmission lines (Works) passing through private land.	Unison	Unison ²	Unison ²
	11kV and 230/400V electrical lines (Works) on private land serving two or more customers.	Unison	Unison ^{2,3}	Unison ^{2,3}
	230/400V electrical lines (service main) serving only one customer.	Customer	Customer	Customer
	Electrical line structures (i.e. pole/s) supporting one or multiple service mains.	Customer	Customer	Customer

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¹ Unison has an agreement with Chorus whereby Unison utilises Chorus owned poles to support low voltage road crossings. Ownership and maintenance responsibilities for these poles remains with Chorus. This ownership is reflected in Unison's asset records.

² Ownership could be challenged if works were installed post 1993 unless an easement and/or ownership agreement is in place. Historic correspondence or ownership agreements may need to be referenced or negotiation with the customer undertaken to resolve ownership and maintenance responsibilities.

³ There is a small number of embedded networks within Unison's network footprint which are customer owned. Unison's asset records reflects this ownership.

Existing Electrical Lines and Equipment, Continued

3.5 Ownership and maintenance responsibilities of existing works (cont)

Location	Equipment	Pre 1993 Ownership Responsibility	Post 1993 Ownership Responsibility	Current Maintenance Responsibility
Private land (cont)	Electrical equipment (Works) supplying only one customer.	Unison ⁵ unless customer took supply at 11kV and was metered at 11kV in which case ownership may vary between equipment types.	Unison ^{4,5} , unless customer took supply at 11kV or LV summated metering was installed, and an ownership agreement was signed specifying customer equipment ownership. In this case ownership may vary between equipment types.	Unison, unless or until there is an ownership agreement in place which specifically states the ownership and maintenance of specific electrical equipment is the responsibility of the customer or equipment owner or Unison records have the ownership as customer or private.
	11kV electrical lines serving only one customer.	Unison ⁵ unless customer took supply at 11kV and was metered at 11kV in which case the customer may own the electrical line.	Unison ^{4,5} unless customer took supply at 11kV or LV summated metering was installed, and an ownership agreement was signed specifying customer line ownership.	Unison, unless or until there is an ownership agreement in place which specifically states the ownership and maintenance of the electrical line is the responsibility of the customer, or line owner, or Unison records have the ownership as customer or private.
Private land <u>NOT</u> owned by the customer or landlord	230/400V electrical lines serving only one customer	Customer	Unison or Customer ^{6,7}	Customer or Unison subject to ownership.
	230/400V lines serving two or more consumers	Unison	Unison	Unison

Table 2 – Ownership of Existing Works

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⁴ Ownership could be challenged unless an easement and/or ownership agreement is in place. Historic correspondence or ownership agreements may need to be referenced or negotiation with the customer undertaken to resolve ownership and maintenance responsibilities.

⁵ Ownership agreements may exist which in some instances can alter the responsibilities outlined in this table. Agreements are in place for many large, mainly Hawke's Bay industrial sites that specify customer ownership and maintenance responsibilities.

⁶ Where a subsequent subdivision has occurred, which creates a situation whereby an existing service main becomes installed on third party land, the ownership of this service main remains with the customer.

⁷ Where a customer has installed a service main on third-party land and secured the necessary easement, the service main ownership remains with the customer.

Existing Electrical Lines and Equipment, Continued

3.6

Determining ownership

Other information used to assist with determination of ownership includes:

- the existence (or otherwise) and location of a network point of isolation
 - historic maintenance and service records, and
 - asset information contained in Unison's asset information databases i.e. GIS, Enterprise Asset Management System (EAMS) including any ownership agreements or other records pertaining to ownership.
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4. Electrical Line and Equipment Ownership and Information

4.1 Electrical line and equipment ownership information

Unison's EAMS is the main repository for electrical equipment related information including ownership information.

Other Unison systems including the GIS and SharePoint also contain electrical line and electrical equipment ownership information including ownership agreements.

While every effort has been to ensure accuracy, some errors and incorrect assumptions may have been made during or after the initial data capture process, and the information may not be current or accurate. If there is any doubt as to the validity of system information or the ownership of specific electrical lines or electrical equipment, these queries should be referred to the Operational Asset Manager.

All newly constructed Unison owned electrical lines and electrical equipment must have ownership fields in Unison's systems accurately populated to align with this policy.

4.2 Changes to ownership

Changes to electrical line and/or equipment ownership because of additional customer connections or for any other reason are required to be legally transferred through an agreement. Existing customer owned electrical lines and equipment where ownership is going to be transferred to Unison, are to be afforded the same protection as described in Table 1.

Where ownership has changed, and new ownership agreements have been established, these are to be saved into Unison's contracts management register with:

- the relevant ownership fields updated in GIS, and/or
 - EAMS and links to the document established in GIS as per **NK1002 Unison's Easement Process**.
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Appendix A – Summary of Document Changes

Date	Version No.	Changes to Document	Creator	Authoriser	Approver
31/10/2006	1.0	New document	Commercial Manager	GM Networks & Operations	CEO
20/11/2008	1.1	Appendix A – Drawings added.	Commercial Manager	GM Networks & Operations	CEO
15/01/2010	1.2	Appendix A – more drawings added.	Commercial Manager	GM Networks & Operations	CEO
17/10/2019	2.0	Full review. Complete document re-write. Drawings showing examples of connections have been removed and to be included in new connections standard. Policy name changed from Service Main Ownership. Service mains replaced with electrical fittings. COP replaced with POS.	Operational Asset Manager	GM Networks & Operations	CEO