

## ENERGY, INFRASTRUCTURE, AND TRANSPORT

### NU – Network Utilities

*The provisions in this chapter override the respective Zone provisions in Part 3 Area-Specific Matters, unless otherwise specified in this chapter.*

#### Introduction

The purpose of the Network Utilities chapter is to manage the construction, operation and maintenance of all network utilities. Network utilities are physical resources that provide infrastructure service networks such as water supply, sewerage, trade waste and stormwater drainage networks, roads and rail networks, cycleway and walkway networks, telecommunication networks, **radio-communication** facilities, electricity and gas transmission and distribution networks, and associated buildings, structures, equipment and customer connections.

**Commented [JKS1]:** S117.016 Chorus, S118.016 Spark, S119.016 Vodafone - Hearing 7 Network Utilities, Key Issue 10

Network utilities provide essential services and are critical to the efficient and **ongoing** functioning of the District. They enable communities to undertake everyday activities and functions and allow people to provide for their social, cultural and economic wellbeing and their health and safety.

**Commented [JKS2]:** Correcting spelling error under Clause 16(2) of the First Schedule of the RMA.

Under the RMA, the Council is required to manage the effects of the use and development of network utilities on the environment, as it must for other land use activities. Given the essential role of network utilities, it is recognised that network utility operators require certainty as to those works which can proceed without resource consent and those which require consent.

To achieve this, the network utility provisions in the District Plan provide for the establishment, operation and maintenance of network utilities throughout the District, and manage their adverse effects on the environment (particularly in sensitive environments such as the coastal environment, outstanding landscapes, significant natural areas, areas containing cultural or historic heritage values, and areas subject to natural hazard). Because many network utilities are lineal, and traverse many parts of the District, it is considered appropriate that a single set of rules are provided which apply across the District.

[In addition to the provisions in this chapter, a number of other Part 2: District-Wide Matters chapters also contain provisions that may be relevant to network utilities \(e.g. NH – Natural Hazards, TRANS – Transport, HH – Historic Heritage, ECO – Ecosystems & Indigenous Biodiversity, SUB – Subdivision, EW – Earthworks, LIGHT - Light, and NOISE - Noise\).](#)

**Commented [JKS3]:** S117.041 Chorus, S118.041 Spark, S119.041 Vodafone - Network Utilities, Topic, Key Issue 6

Provisions to manage the effects of other activities on network utilities (including state highway and rail corridors, the National Grid, and gas transmission pipelines) are contained elsewhere in the District Plan, in the respective zones in Part 3 of the District Plan, and the NOISE – Noise chapter of the District Plan.

**Commented [JKS4]:** S56.005 Powerco - Network Utilities Topic, Key Issue 3

A number of network utility operators, including the Council, also utilise their ability to designate sites for a specified network utility purpose. Designations are identified on the Planning Maps and are listed in the District Plan.

Additional regulatory requirements, separate to the District Plan, are also relevant to network utilities, including:

- The requirements of the Resource Management (National Environmental Standards for Electricity Transmission Activities) Regulations 2009 (NESETA) which apply directly to the operation, maintenance, upgrading, relocation or removal of transmission line(s) that were operating or able to be operated on or prior to 14 January 2010 and remain part of the National Grid. In the case of conflict or perceived conflict with any provision of this plan, the NESETA provisions prevail.
- The Resource Management (National Environmental Standards for Telecommunication Facilities) Regulations 2016 (NESTF) which apply to Telecommunications infrastructure, such as cabinets, antennas, poles, small-cell units and telecommunications lines. In the case of conflict or perceived conflict with any provision of this plan, the NESTF provisions must prevail.
- Where relevant, the requirements of the National Code of Practice for Utility Operators' Access to Transport Corridors will apply to the placement, maintenance, upgrading and removal of network utility structures in the road.
- Compliance with the NZECP 34:2001 New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP 34:2001) is mandatory under the Electricity Act 1992. All activities regulated by the NZECP 34:2001, including any activities that are otherwise permitted by the plan, must comply with this regulation.
- Compliance with the Electricity (Hazards from Trees) Regulations 2003 is mandatory. All activities regulated by these regulations, including any activities that are otherwise permitted by the plan, must comply with this regulation.
- Connections to a network utility require approval of the relevant network utility operator, and works within roads require approval of the relevant road controlling authority.

In the case of conflict with any other provision of this Plan, including any rule in this Chapter, the provisions of the NESETA and NESTF must prevail.

Amateur radio does not fit within the definition of network utilities and is not subject to the same rules. However, specific rules for amateur radio are included within this part of the District Plan, because they are a form of radio-communication and have similar attributes.

The construction, operation, maintenance, replacement, removal and upgrading of cycleways or walkways located within road reserve are subject to the rules of this chapter.

Cycleways and walkways located outside road reserve fall within the definition of 'Community Facilities' and are subject to the relevant zone rules.

Commented [JKSS]: S117.016 Chorus, S118.016 Spark, S119.016 Vodafone - Hearing 7 Network Utilities, Key Issue 10

## Issues

### NU-11 Essential Role of Network Utilities

Network utilities have important functions and enable people and communities to provide for their health and safety and social, economic, and cultural wellbeing, ~~but can have adverse effects on the environment, often due to their technical, operational, and location-specific requirements.~~

Commented [JKS6]: S56.006 Powerco - Network Utilities Topic, Key Issue 4

#### Explanation

Network utilities are physical resources which are an essential part of the District's infrastructure in providing for the efficient and ongoing functioning of the District and the social, economic and cultural well-being of people and communities, and for their health and safety. By their nature, network utilities vary in scale and significance, are located above and below ground, are dispersed throughout the District, and often have functional and/or operational needs in order to ensure a safe, efficient, secure and resilient service. This can generate specific locational requirements. The contribution to everyday life, to the economy and to connecting people and communities, including in emergencies, means that provision for the operation and development of network utilities is significant.

### NU-12 Adverse Effects of Network Utilities and Amateur Radio Configuration

Some network utilities and amateur radio facilities can have adverse effects on the environment, ~~often due to their technical, operational, and location-specific requirements.~~

Commented [JKS7]: S56.007 Powerco - Network Utilities Topic, Key Issue 4

#### Explanation

Network utilities, particularly where small-scale and/or located underground, can have only a minor impact on the environment. Some network utilities and amateur radio facilities can, however, have adverse effects on the environment. These effects may result from land disturbance in establishing them, be generated by the operation itself, or be associated with their ongoing maintenance, upgrading or development. Such effects can include visual amenity and landscape character impacts, particularly where siting in prominent areas is required for transmission or service, risks to public health and safety, and generating nuisance such as noise, vibration, lighting, and traffic effects.

The effects of network utilities and amateur radio configuration can also have greater impact on residential environments than other areas, and on sites of significance throughout the District, such as significant natural areas, outstanding landscape features, historical heritage sites and sites of significance to Māori. The siting of network utilities and amateur radio facilities can also potentially worsen risk in areas subject to natural hazards. Sometimes these adverse effects have to be balanced alongside recognising any special technical requirements or constraints which may limit where a network utility can be sited.

**NU-13                    Effects of Other Activities on Network Utilities**

**New subdivision, land use and development may impact on the safe and efficient functioning of network utilities.**

Explanation

New subdivision, land use and development in close proximity to existing network utilities can have the potential to constrain or compromise the efficient or effective operation, maintenance and development of those network utilities. In some instances, this can compromise health and safety through the location of sensitive activities close to network utilities, and through activities not adhering to safe clearances or safe distances from network utilities e.g. from electricity transmission networks (including the National Grid), high pressure gas network, overhead lines and cables, navigational aids, road and railway corridors etc.

**Objectives**

**NU-01                    Recognise and provide for safe, effective, efficient and resilient network utilities throughout the District that provide essential and secure services and connections, including in emergencies, integrate with urban development, contribute to the economy and that enable people and communities to provide for their health, safety and wellbeing.**

**Commented [JKS8]:** S117.031 Chorus, S118.031 Spark, S119.031 Vodafone and S56.009 Powerco - Network Utilities Topic, Key Issue 5

**NU-02                    The adverse effects of network utilities on the environment are avoided, remedied or mitigated, while recognising the functional and operational needs of network utilities (including those associated with their scale, design and locational requirements).**

**NU-03                    The safety, maintenance, upgrade or development of network utilities is not compromised by incompatible subdivision, land use or development, including the potential for reverse sensitivity effects.**

**NU-04:                    Provide for amateur radio configurations, cycleways and walkways within road reserve, electrical vehicle charging facilities outside road reserve, navigational aids, and sensing and environmental monitoring equipment (including air quality and meteorological monitoring structures and devices) where adverse effects on the environment are avoided, remedied or mitigated.**

**Commented [JKS9]:** Correction of minor spelling errors pursuant to Clause 16(2) of the First Schedule of the RMA.

**Policies**

**NU-P1                    Recognise the national, regional and local importance and benefits of network utilities, including as lifeline utilities during an emergency, by:**

**Commented [JKS10]:** S57.023 FENZ - Network Utilities Topic, Key Issue 6

- 1.    enabling the operation, maintenance, repair, minor upgrade or removal of network utilities throughout the District;**

2. providing for upgrades to, and the development of new, network utilities;
3. providing flexibility for network utilities to adopt new technologies that improve access to and efficient use of networks and services, allow for re-use of redundant services or structures, increase resilience, safety or reliability, or result in environmental benefits and enhancements; and
4. recognising the functional and operational needs of network utilities.

NU-P2

Avoid adverse effects of upgrades to, and the development of new, network utilities on the values and attributes of areas identified in the District Plan asof:

1. Historical Heritage Items (in HH-SCHED2) and Notable Trees (in TREE-SCHED4);
2. Wāhi Tapu, Wāhi Taonga and Sites and Areas of Significance to Māori (in SASM-SCHED3);
3. Significant Natural Areas (in ECO-SCHED5); and
4. Outstanding Natural Features and Landscapes (in NFL-SCHED6);

while recognising the extent to which adverse effects can be avoided, may be constrained by a network utility's functional or operational needs.

Commented [JKS11]: S129.022 Kainga Ora - Network Utilities Topic, Key Issue 6

NU-P3

Avoid significant adverse effects and remedy or mitigate other adverse effects of upgrades to, and the development of new, network utilities on the values and attributes of areas identified in the District Plan as:

1. High Natural Character Areas (in CE-SCHED7); and
2. Significant Amenity Features (in NFL-SCHED6);

while recognising the extent to which adverse effects can be avoided, may be constrained by a network utility's functional or operational needs.

Commented [JKS12]: S79.028 Transpower, S90.012 Centralines - Network Utilities Topic, Key Issue 6

NU-P4

Manage the effects of network utilities on the environment by:

1. avoiding, remedying or mitigating adverse effects on:
  - a. natural and physical resources;
  - b. amenity values, including from shading, visual dominance, noise, vibration, light spill, traffic and access, dust nuisance;
  - c. the safe and efficient operation of other network utilities, including effects on electricity distribution and

transmission **networks** and the National Grid, gas transmission pipelines, road and rail networks, and **infrastructural service networks**;

- d. the health, well-being and safety of people and communities, including from exposure to radio-frequency fields and electric and magnetic fields, and by posing a significant risk or exacerbating an existing risk of natural hazards;
2. requiring compliance with recognised standards and guidelines for the potential adverse effects of noise, vibration, radiofrequency fields and electric and magnetic fields;
3. encouraging the progressive undergrounding of appropriate network utilities in new areas of development within the General Residential, Rural Lifestyle, Large Lot Residential and Settlement Zones and the systematic replacement of existing overhead services with underground reticulation or the upgrading of existing overhead services within these areas, where this is technically and commercially viable;
4. encouraging the co-siting and sharing of masts, facilities, utility corridors and other innovative solutions within residential environments and roads, where technically feasible and practicable; and
5. **encouraging the removal of redundant and superseded network utilityutilities facilities.**

Commented [JKS13]: S90.013 Centralines - Network Utilities Topic, Key Issue 6

NU-P5

To ~~manage protect network utilities from~~ the adverse effects of subdivision, use and development **to ensure that may constrain or compromise** the safe, effective, secure and efficient operation, maintenance, upgrading and development of network utilities **is not constrained or compromised, and the safety and amenity values of people and the community**, including by:

1. **managing new activities through setbacks and design controls, where necessary, to achieve appropriate protection of a network utility;**
2. **managing new activities that are sensitive to noise adjoining the railway corridor, the national and regional road network, and within any defined noise contour to avoid reverse sensitivity effects;**
3. **managing access to the railway corridor and to the national and regional road network;**
4. **managing light spill and glare from activities on road users;**
5. **managing land disturbance and activities in the vicinity of gas transmission pipelines;**
6. **managing land use development (including sensitive activities), buildings, structures and subdivision near the National Grid,**

Commented [JKS14]: S56.015 Powerco - Network Utilities Topic, Key Issue 6

within the National Grid Yard, or around a designated National Grid substation;

7. managing land disturbance, earthworks and vertical holes, land use development and buildings to maintain safe electrical clearance distances under electricity distributions lines and support structures; and
8. ensuring subdivision of sites containing a network activity utility retain the ability for the network utility operator to access, operate, maintain, repair and upgrade the network utility.

Commented [JKS15]: S129.025 Kainga Ora - Network Utilities Topic, Key Issue 6

Commented [JKS16]: S81.053, S81.054 Hort NZ, S79.030 Transpower - Network Utilities Topic - Hearing Stream 7 - Right of Reply, 27 January 2023

NU-P6

To manage the effects of amateur radio configuration by designing, constructing and locating associated masts, poles and antennas and their support structures so as to avoid, remedy or mitigate adverse effects on:

1. residential character and amenity values;
2. Historical Heritage Items (in HH-SCHED2) and Notable Trees (in TREE-SCHED4);
3. Wāhi Tapu, Wāhi Taonga and Sites and Areas of Significance to Māori (in SASM-SCHED3);
4. Significant Natural Areas (in ECO-SCHED5); and
5. Outstanding Natural Features and Landscapes (in NFL-SCHED6).

Commented [JKS17]: S129.026 Kainga Ora - Network Utilities Topic, Key Issue 6

NU-PX Manage the adverse effects of the planning and development of the National Grid by:

1. Considering the extent to which any adverse effects have been avoided, remedied or mitigated by the route, site and method selection process.
2. In rural environments, seeking to avoid adverse effects on identified High Natural Character Areas (in CE-SCHED7), Outstanding Natural Features and Landscapes (in NFL-SCHED6), Significant Natural Areas (in ECO-SCHED5), Significant Amenity Features (in NFL-SCHED6), Historic Heritage Items (in HH-SCHED2), Notable Trees (in TREE-SCHED4), and Wāhi Tapu, Wāhi Taonga and Sites and Areas of Significance to Māori (in SASM-SCHED3).
3. Seeking to avoid significant adverse effects on other areas of natural character and other natural features and landscapes in the coastal environment.
4. Considering constraints imposed on achieving measures to avoid, remedy or mitigate other adverse environmental effects by the functional or operationa needs of the network.

In the event of any conflict with any other objectives and policies within the Plan, Policy NU-PX takes precedence.

Commented [JKS18]: Hearing Stream 7 - Right of Reply dated 27 January 2023 - in response to S79.026 Transpower - Network Utilities Topic

**NU-PXX** To the extent reasonably possible manage land use development (including sensitive activities), buildings, earthworks, vertical holes and structures within the National Grid Yard, and subdivision within the National Grid Subdivision Corridor, to:

1. Avoid reverse sensitivity effects where it may compromise the operation, maintenance, upgrading and development of the National Grid;
2. Ensure that buildings and structures do not compromise the operation, maintenance, upgrading and development of the National Grid; and
3. Manage subdivision within the National Grid Subdivision Corridor to avoid subsequent land use from compromising the operation, maintenance, upgrading and development of the National Grid.

Commented [JKS19]: Hearing Stream 7 - Right of Reply dated 27 January 2023 - in response to S79.030 Transpower, S81.053, S81.054 Hort NZ- Network Utilities Topic

### Rule Overview Table

Use/activity	Rule Number
Operation, maintenance, replacement and removal of existing network utilities (that are not regulated by an NES)	NU-R1
Minor upgrading of existing network utilities	NU-R2
Construction of new network utilities, and upgrading of existing network utilities (that are not regulated by an NES) – within the National Grid Yard (other than for the reticulation and storage of water for irrigation purposes carried out by a network utility operator)	NU-R3
Construction of new network utilities, and upgrading of existing network utilities (that are not regulated by an NES), not already provided for in NU-R3 (within the National Grid Yard)	NU-R4
Cycleways or walkways within road reserve	NU-R5
Amateur radio configuration activities	NU-R6
Electrical vehicle charging facilities located outside road reserve	NU-R7



<b>Navigational aids, sensing and environmental monitoring equipment (including air quality and meteorological monitoring structures and devices)</b>	NU-R8
<b>Activities not otherwise provided for</b>	NU-R9

## Rules

### Notes:

The following rules do not cover all network utility activities. Network utilities may be exempt from rules because they operate under designations or national environmental standards (e.g. the National Environmental Standards for Electricity Transmission Activities (2009) or the National Environmental Standards for Telecommunication Facilities (2008)). Reference should be made to the Ministry for the Environment website for the latest version of any relevant National Environmental Standards.

Rules relating to subdivision and land development involving network utilities and other activities addressed in this chapter are contained in the SUB – Subdivision chapter of the District Plan.

Rules relating to earthworks associated with activities addressed in this chapter are contained in the EW – Earthworks chapter of the District Plan.

Rules for activities addressed in this chapter that are located within the identified ONLs and ONFs are contained in this chapter.

The construction, operation, maintenance, replacement, removal and upgrading of cycleways or walkways located within road reserve are subject to the rules of this chapter.

Cycleways and walkways located outside road reserve fall within the definition of 'Community Facilities' and are subject to the relevant zone chapter rules.

It is important to note that in addition to the provisions in this chapter, a number of other Part 2: District-Wide Matters chapters also contain provisions that may be relevant to network utilities (e.g. [NH – Natural Hazards](#), [TRANS – Transport](#), [HH – Historic Heritage](#), [ECO – Ecosystems & Indigenous Biodiversity](#), [SUB – Subdivision](#), [EW – Earthworks](#), [LIGHT - Light](#), and [NOISE - Noise](#)).

Commented [JKS20]: Section 16(2) of the First Schedule of the RMA - minor correction

Commented [JKS21]: S117.041 Chorus, S118.041 Spark, S119.041 Vodafone - Hearing 7 Network Utilities, Key Issue 6

### NU-R1 Operation, maintenance, replacement, and removal of existing network utilities (that are not regulated by an NES)

All Zones	<b>1. Activity Status: PER</b>	<b>2. Activity status where compliance with condition NU-R1(1)(a) is not achieved: RDIS</b>
	<b>Where the following conditions are met:</b> a. Compliance with: i. NU-S1;	<b>Matters over which discretion is restricted:</b>

<ul style="list-style-type: none"> <li>ii. NU-S2;</li> <li>iii. NU-S3;</li> <li>iv. NU-S4;</li> <li>v. NU-S5; and</li> <li>vi. NU-S6.</li> </ul> <p>b. Compliance with:</p> <ul style="list-style-type: none"> <li>i. NU-S7 (Radio Frequency Fields); and</li> <li>ii. NU-S8 (Electric and Magnetic Fields).</li> </ul>	<ul style="list-style-type: none"> <li>a. Functional and operational requirements of the network utility.</li> <li>b. Effects on character and amenity of adjoining sites and surrounding environment.</li> <li>c. Effects on public health and safety.</li> <li>d. Impacts on the functional requirements and safe operation of other network utilities.</li> </ul>
<p><b>3. Activity status where compliance with condition NU-R1(1)(b) is not achieved: NC</b></p>	

**NU-R2 Minor upgrading of existing network utilities**

<p><b>All Zones</b></p>	<p><b>1. Activity Status: PER</b></p> <p><b>Where the following conditions are met:</b></p> <ul style="list-style-type: none"> <li>a. Limited to: <ul style="list-style-type: none"> <li>i. The realignment, configuration, relocation or replacement of electricity, or telecommunication line, pipe, pole, conductors, cross arms, switches, transformers, cabinets or ancillary structures must be: <ul style="list-style-type: none"> <li>a. within <del>2m</del><b>3m</b> of the existing alignment or location; and</li> <li>b. within 5m of the existing alignment or location when associated with road widening, road safety or electricity clearance.</li> </ul> </li> <li>ii. Alterations and additions to overhead electricity and telecommunication lines on existing poles must not: <ul style="list-style-type: none"> <li>a. increase the number of conductors or wires/lines by more than 100 percent.</li> </ul> </li> </ul> </li> </ul>	<p><b>2. Activity status where compliance with condition NU-R2(1)(a) is not achieved: RDIS</b></p> <p><b>Matters over which discretion is restricted:</b></p> <ul style="list-style-type: none"> <li>a. Functional and operational needs of, and benefits derived from, the network utility.</li> <li>b. Purposes and necessity of the upgrading.</li> <li>c. Potential adverse visual effects of the upgrading, including impacts on the amenity values of the locality and any contribution to cumulative adverse effects.</li> <li>d. Potential adverse effects on heritage values.</li> <li>e. Potential adverse effects on Historical Heritage Items (in HH-SCHED2) and Notable Trees (in TREE-SCHED4), Wāhi Tapu, Wāhi Taonga and Sites and Areas of Significance to Māori (in SASM-SCHED3), Significant Natural Areas (in ECO-</li> </ul>
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**Commented [JKS22]:** Minor amendment pursuant to Clause 16(2) of the First Schedule of the RMA.

**Commented [JKS23]:** S117.043 Chorus, S118.043 Spark, S119.043 Vodafone - Network Utilities Topic - Hearing Stream 7 - Right of Reply, 27 January 2023

- b. exceed a diameter of 50mm; and
- c. have additional cross arms that exceed the length of the existing cross arm by more than 100 percent, up to a maximum of 4m.
- iii. The diameter of a single replacement overhead conductor or line must not exceed the diameter of the replaced conductor or line, or 50mm, whichever is the greater.
- iv. The addition or replacement of earthwires (either overhead or underground) and underground earthgrids, may contain telecommunication lines and earthpeaks or above ground insulators on the poles.
- v. Any pole that replaces an existing pole must not:
  - a. have a diameter or width that is twice that of the replaced pole at its widest point; or
  - b. exceed three times the width of the replacement pole at its widest point, where a single pole is replaced with a pi pole; and
  - c. have a height exceeding more than 1m above the height of the replaced pole or the relevant maximum height limit for above ground structures under NU-S3, whichever is the greater; and
  - d. be replaced with a tower.
- vi. There must be no additional towers.
- vii. Any tower that replaces an existing tower must:
  - a. not exceed the height of the replaced tower or the maximum height limit for

SCHED5), and Outstanding Natural Features and Landscapes (in NFL-SCHED6).

- f. Potential adverse effects on natural hazards.
- g. Any measures to avoid, remedy or mitigate adverse effects.

**3. Activity status where compliance with condition NU-R2(1)(b) is not achieved: DIS**

**34. Activity status where compliance with condition NU-R2(1)(bc) is not achieved: NC**

Commented [JKS24]: S90.017 Centralines - Hearing 7 Network Utilities, Key Issue 7.

Commented [JKS28]: S81.056 HortNZ - Hearing 7 Network Utilities, Key Issue 7

Commented [JKS29]: S81.056 HortNZ - Hearing 7 Network Utilities, Key Issue 7

Commented [JKS25]: Hearing Stream 7 - Right of Reply dated 27 January 2023 - in response to S117.043 Chorus, S118.043 Spark, S119.043 Vodafone - Network Utilities Topic

- above ground structures under NU-S3, whichever is the greater; and
- b. not have a footprint that exceeds the width of the existing tower by more than 25 percent.
- viii. Up to two additional electricity poles may be installed in existing networks where necessary to achieve conductor clearances required by NZCEP 34:2001.
- ix. The diameter of above ground replacement pipes must not exceed the diameter of the replaced pipe by more than 300mm.
- x. Where a new antenna replaces an existing antenna, the new antenna must not:
- a. Exceed 3.5m in length and 700mm in width or the maximum dimension of the existing antenna by more than 20 percent, whichever is the greater; and
  - b. where it is a dish antenna, exceed 1.2m in diameter or the diameter of the existing antenna by more than 20 percent, whichever is the greater; and
  - c. where it is attached to a facility, increase the height of the facility by more than 1m, unless the height increase is a result of an increase in the size of the new antenna only.

b. The voltage of an existing line must not increase beyond the voltage at which the existing line has been constructed to operate.

b-c. Compliance with:

- i. NU-S7 (Radio Frequency Fields); and

**Commented [JKS26]:** Hearing Stream 7 - Right of Reply dated 27 January 2023 - in response to S117.043 Chorus, S118.043 Spark, S119.043 Vodafone - Network Utilities Topic

**Commented [JKS27]:** S81.056 HortNZ - Hearing 7 Network Utilities, Key Issue 7

- ii. NU-S8 (Electric and Magnetic Fields).

**NU-R3 Construction of new network utilities, and upgrading of existing network utilities (that are not regulated by an NES) – within the National Grid Yard (~~other than for the reticulation and storage of water for irrigation purposes carried out by a network utility operator~~)**

Commented [JKS30]: S81.057 HortNZ - Hearing 7 Network Utilities, Key Issue 7

**All Zones**

**1. Activity Status: PER**

**Where the following activity conditions are met:**

- a. Compliance with:
  - i. NU-S1;
  - ii. NU-S2;
  - iii. NU-S3;
  - iv. NU-S4;
  - v. NU-S5; and
  - vi. NU-S6.
- b. Compliance with:
  - i. NU-S7 (Radio Frequency Fields); and
  - ii. NU-S8 (Electric and Magnetic Fields).
- c. Compliance with the New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP) 34:2001 ISSN 0114-0663 under all National Grid transmission line operating conditions.
- d. The activity is located a minimum distance of 12 metres from the outer visible foundation of any National Grid support structure and associated stay wire, unless it:
  - i. is a building or structure where Transpower has given written approval in accordance with clause 2.4.1 of the NZECP 34:2001 ISSN 0114-0663; or
  - ii. is a network utility (~~other than for the reticulation and storage of water for irrigation purposes~~) or any part of electricity infrastructure undertaken by a network utility operator that

**2. Activity status where condition NU-R3(1)(a) is not achieved: RDIS**

**Matters of discretion are restricted to:**

- a. Functional and operational needs of, and benefits derived from, the network utility.
- b. Effects on public health and safety.
- c. Whether alternative locations, routes or other options are physically or technically practicable.
- d. The matters set out in policies NU-P1, NU-P2, NU-P3, NU-P4 and NU-P5.

**Notification:** Non-notified

**3. Activity status where conditions NU-R3(1)(b), NU-R3(1)(c) and/or NU-R3(1)(d) is not achieved: NC**

connects to the National Grid;  
 .and  
 e. The activity does not permanently physically impede existing vehicular access to a National Grid support structure.

Commented [JKS31]: S81.057 HortNZ - Hearing 7 Network Utilities, Key Issue 7

Commented [JKS32]: S79.034 Transpower - Hearing 7 Network Utilities, Key Issue 7.

Commented [JKS33]: Section 16(2) of the First Schedule of the RMA - minor amendment to provide clarification and avoid potential confusion.

**NU-R4 Construction of new network utilities, and upgrading of existing network utilities (that are not regulated by an NES), not already provided for in -NU-R3 (within the National Grid Yard)**

All Zones	<b>1. Activity Status: PER</b>  <b>Where the following activity conditions are met:</b> a. Compliance with: i. NU-S1; ii. NU-S2; iii. NU-S3; iv. NU-S4; v. NU-S5; and vi. NU-S6. b. Compliance with: i. NU-S7 (Radio Frequency Fields); and ii. NU-S8 (Electric and Magnetic Fields). c. The activity is not within the National Grid Yard.	<b>2. Activity status where condition NU-R4(1)(a) is not achieved: RDIS</b>  <b>Matters of discretion are restricted to:</b> a. Functional and operational needs of, and benefits derived from, the network utility. b. Effects on public health and safety. c. Whether alternative locations, routes or other options are physically or technically practicable. d. The matters set out in policies NU-P1, NU-P2, NU-P3 and NU-P4.  <b>Notification:</b> Non-notified
		<b>3. Activity status where conditions NU-R4(1)(b) and/or NU-R4(1)(c) is not achieved: NC</b>

**NU-R5 Cycleways or walkways within road reserve**

All Zones	<b>1. Activity Status: PER</b>  <b>Where the following activity conditions are met:</b> a. The activity is not within the National Grid Yard.	<b>2. Activity status where condition NU-R5(1)(a) is not achieved: NC</b>
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**NU-R6 Amateur radio configuration activities**

All Zones	<b>1. Activity Status: PER</b>  <b>Where the following activity conditions are met:</b> <ul style="list-style-type: none"> <li>a. Compliance with NU-S9 (Amateur Radio Configuration).</li> <li>b. Compliance with NU-S7 (Radio Frequency Fields).</li> <li>c. The activity is not within the National Grid Yard.</li> <li>d. The activity is not within an Outstanding Natural Landscape or Outstanding Natural Feature identified in NFL-SCHED6.</li> </ul>	<b>2. Activity status where condition NU-R6(1)(a) is not achieved: RDIS</b>  <b>Matters of discretion are restricted to:</b> <ul style="list-style-type: none"> <li>a. Functional and operational needs of, and benefits derived from, the amateur radio configuration.</li> <li>b. Effects on public health and safety.</li> <li>c. Where more than one standard will be infringed, the cumulative effects of all infringements considered together.</li> <li>d. The matters set out in policy NU-P6.</li> </ul>
		<b>3. Activity status where condition NU-R6(1)(d) is not achieved: DIS</b>
		<b>4. Activity status where conditions NU-R6(1)(b) and/or NU-R6(1)(c) is not achieved: NC</b>

**NU-R7 Electrical vehicle charging facilities located outside road reserve**

All Zones	<b>1. Activity Status: PER</b>  <b>Where the following activity conditions are met:</b> <ul style="list-style-type: none"> <li>a. The activity is installed in association with an existing permitted or consented parking spaces, vehicle depot or garage structure.</li> <li>b. Compliance with: <ul style="list-style-type: none"> <li>i. NU-S1;</li> <li>ii. NU-S2;</li> <li>iii. NU-S3;</li> <li>iv. NU-S4;</li> <li>v. NU-S5; and</li> <li>vi. NU-S6.</li> </ul> </li> </ul>	<b>2. Activity status where condition NU-R7(1)(b) is not achieved: RDIS</b>  <b>Matters of discretion are restricted to:</b> <ul style="list-style-type: none"> <li>a. Functional and operational requirements of the electrical vehicle charging facility.</li> <li>b. Effects on character and amenity of adjoining sites and surrounding environment and any contribution to cumulative adverse effects.</li> <li>c. Effects on public health and safety.</li> </ul>

<ul style="list-style-type: none"> <li>c. Compliance with: <ul style="list-style-type: none"> <li>i. NU-S7 (Radio Frequency Fields); and</li> <li>ii. NU-S8 (Electric and Magnetic Fields).</li> </ul> </li> <li>d. The activity is not within the National Grid Yard.</li> </ul>	<ul style="list-style-type: none"> <li>d. Potential adverse effects on heritage values.</li> <li>e. Potential adverse effects on: <ul style="list-style-type: none"> <li>i. Historical Heritage Items (in HH-SCHED2),</li> <li>ii. Notable Trees (in TREE-SCHED4),</li> <li>iii. Wāhi Tapu, Wāhi Taonga and Sites and Areas of Significance to Māori (in SASM-SCHED3),</li> <li>iv. Significant Natural Areas (in ECO-SCHED5), and</li> <li>v. Outstanding Natural Features and Landscapes (in NFL-SCHED6).</li> </ul> </li> <li>f. Any measures to avoid, remedy or mitigate adverse effects.</li> </ul>
	<p><b>3. Activity status where condition NU-R7(1)(a) is not achieved: DIS</b></p>
	<p><b>4. Activity status where conditions NU-R7(1)(c) and/or NU-R7(1)(d) is not achieved: NC</b></p>

**NU-R8 Navigational aids, sensing and environmental monitoring equipment (including air quality and meteorological monitoring structures and devices)**

<p><b>All Zones</b></p>	<p><b>1. Activity Status: PER</b></p> <p><b>Where the following activity conditions are met:</b></p> <ul style="list-style-type: none"> <li>a. Compliance with: <ul style="list-style-type: none"> <li>i. NU-S1;</li> <li>ii. NU-S2;</li> <li>iii. NU-S3;</li> <li>iv. NU-S4;</li> <li>v. NU-S5; and</li> <li>vi. NU-S6.</li> </ul> </li> <li>b. Compliance with:</li> </ul>	<p><b>2. Activity status where condition NU-R7(1)(a) is not achieved: RDIS</b></p> <p><b>Matters of discretion are restricted to:</b></p> <ul style="list-style-type: none"> <li>a. Functional and operational requirements of the aids and/or equipment.</li> <li>b. Effects on character and amenity of adjoining sites and surrounding environment and</li> </ul>
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	<ul style="list-style-type: none"> <li>i. NU-S7 (Radio Frequency Fields); and</li> <li>ii. NU-S8 (Electric and Magnetic Fields).</li> </ul> <p>c. The activity is not within the National Grid Yard.</p>	<ul style="list-style-type: none"> <li>any contribution to cumulative adverse effects.</li> <li>c. Effects on public health and safety.</li> <li>d. Potential adverse effects on heritage values.</li> <li>e. Potential adverse effects on: <ul style="list-style-type: none"> <li>i. Historical Heritage Items (in HH-SCHED2),</li> <li>ii. Notable Trees (in TREE-SCHED4),</li> <li>iii. Wahi Tapu, Wahi Taonga and Sites and Areas of Significance to Māori (in SASM-SCHED3),</li> <li>iv. Significant Natural Areas (in ECO-SCHED5), and</li> <li>v. Outstanding Natural Features and Landscapes (in NFL-SCHED6).</li> </ul> </li> <li>f. Any measures to avoid, remedy or mitigate adverse effects.</li> </ul> <p><b>Notification:</b> Non-notified</p>
<b>NU-R9 Activities not otherwise provided for (that are not regulated by an NES)</b>		
<b>All Zones</b>	<p><b>1. Activity Status: DIS</b></p> <p>Where the following conditions are met: N/A</p>	<p><b>2. Activity status where compliance not achieved: N/A</b></p> <p><b>3. Activity status where conditions NU-R7(1)(b) and/or NU-R7(1)(c) is not achieved: NC</b></p>

## Standards

NU-S1 <b>Gross-Floor-Area</b> Size and Dimensions	
<b>General Residential Zone</b> <b>Settlement Zone</b> <b>Rural Lifestyle Zone</b> <b>Large Lot Residential Zone (Coastal)</b>	<ol style="list-style-type: none"> <li>1. Above ground buildings and structures must not exceed a gross floor area limit of:               <ol style="list-style-type: none"> <li>a. 10m<sup>2</sup> (where located within road reserve); and</li> <li>b. 15m<sup>2</sup> (where located outside road reserve).</li> </ol> </li> <li>2. A dish antenna must not exceed 1.2m in diameter.</li> <li>3. A panel antenna must:               <ol style="list-style-type: none"> <li>a. fit within an envelope of 3.5m in length and 0.7m in width (where located within road reserve); and</li> <li>b. not exceed a width of 0.7m (where located outside road reserve).</li> </ol> </li> <li>4. A headframe must not exceed 2.5m in diameter.</li> <li>5. Omni directional 'whip' or dipole antenna must not exceed:               <ol style="list-style-type: none"> <li>a. 1.6m in vertical length;</li> <li>b. 60mm in diameter; and</li> <li>c. 1.5m in horizontal length.</li> </ol> </li> <li>6. A telecommunications cabinet must not exceed a footprint of 2.5m<sup>2</sup> and height of 2m.</li> <li>7. A group of telecommunications cabinets must not exceed a combined footprint of 3m<sup>2</sup>.</li> <li>8. A telecommunications kiosk must not exceed a height of 3.5m and a footprint of 1.5m<sup>2</sup>.</li> </ol>
<b>General Rural Zone</b> <b>Rural Production Zone</b>	<ol style="list-style-type: none"> <li>9. Above ground buildings and structures must not exceed a gross floor area limit of:               <ol style="list-style-type: none"> <li>a. 10m<sup>2</sup> (where located within road reserve); and</li> <li>b. 50m<sup>2</sup> (where located outside road reserve).</li> </ol>               Except that:                Where located within an Outstanding Natural Landscape or Outstanding Natural Feature identified in NFL-SCHED6, above ground buildings and structures must not exceed a gross floor area limit of:               <ol style="list-style-type: none"> <li>c. 10m<sup>2</sup> (where located within road reserve); and</li> <li>d. 25m<sup>2</sup> (where located outside road reserve).</li> </ol> </li> <li>10. A dish antenna must not exceed 3m in diameter.</li> <li>11. A panel antenna must:               <ol style="list-style-type: none"> <li>a. fit within an envelope of 3.5m in length and 0.7m in width (where located within road reserve); and</li> <li>b. not exceed a width of 0.7m (where located outside road reserve).</li> </ol> </li> <li>12. A headframe must not exceed 6m in diameter.</li> <li>13. Omni directional 'whip' or dipole antenna must not exceed:               <ol style="list-style-type: none"> <li>a. 1.6m in vertical length;</li> <li>b. 60mm in diameter; and</li> </ol> </li> </ol>

Commented [JKS34]: S117.047 Chorus, S118.047 Spark and S119.047 Vodafone - Hearing 7 Network Utilities, Key Issue 8

	<p>c. 1.5m in horizontal length.</p> <p>14. A telecommunications cabinet must not exceed a footprint of 2.55m<sup>2</sup> and height of 2.5m.</p> <p>15. A group of telecommunications cabinets must not exceed a combined footprint of 3m<sup>2</sup>.</p> <p>16. A telecommunications kiosk must not exceed a height of 3.5m and a footprint of 3.5m<sup>2</sup>.</p>
<p><b>Commercial Zone</b></p> <p><b>General Industrial Zone</b></p>	<p>17. Above ground buildings and structures must not exceed a gross floor area limit of:</p> <p>a. 10m<sup>2</sup> (where located within road reserve); and</p> <p>b. 50m<sup>2</sup> (where located outside road reserve).</p> <p>18. A dish antenna must not exceed 3m in diameter.</p> <p>19. A panel antenna must:</p> <p>a. fit within an envelope of 3.5m in length and 0.7m in width (where located within road reserve); and</p> <p>b. not exceed a width of 0.7m (where located outside road reserve).</p> <p>20. A headframe must not exceed 6m in diameter.</p> <p>21. Omni directional 'whip' or dipole antenna must not exceed:</p> <p>a. 1.6m in vertical length;</p> <p>b. 60mm in diameter; and</p> <p>c. 1.5m in horizontal length.</p> <p>22. A telecommunications cabinet must not exceed a footprint of 2.55m<sup>2</sup> and height of 2.5m.</p> <p>23. A group of telecommunications cabinets must not exceed a combined footprint of 3m<sup>2</sup>.</p> <p>24. A telecommunications kiosk must not exceed a height of 3.5m and a footprint of 3.5m<sup>2</sup>.</p>
<b>NU-S2 Setbacks</b>	
<p><b>General Residential Zone</b></p> <p><b>Settlement Zone</b></p> <p><b>Rural Lifestyle Zone</b></p> <p><b>Large Lot Residential Zone (Coastal)</b></p>	<p>1. Any part of an above ground building or structure (located outside road reserve) must be set back from the site boundary (excluding road boundaries) by a minimum distance of – 1.5m.</p> <p><u>Except that:</u></p> <p>a. <u>This standard does not apply to poles with a diameter of 600mm or less, and any permitted attachments to the poles.</u></p> <p>2. Any part of an above ground building or structure located within road reserve – No setback requirement.</p>

**Commented [JKS35]:** Hearing Stream 7 - Right of Reply dated 27 January 2023 - in response to S117.047 Chorus, S118.047 Spark, S119.047 Vodafone - Network Utilities Topic

**Commented [JKS36]:** Hearing Stream 7 - Right of Reply dated 27 January 2023 - in response to S117.047 Chorus, S118.047 Spark, S119.047 Vodafone - Network Utilities Topic

**Commented [JKS37]:** S117.048 Chorus, S118.048 Spark, S119.048 Vodafone - Hearing 7 Network Utilities, Key Issue 8

<b>Rural Production Zone</b>  <b>General Rural Zone</b>	3. Any part of an above ground building or structure (located outside road reserve) must be set back from the site boundary (excluding road boundaries) by a minimum of – 5m. <u>Except that:</u> <u>a. This standard does not apply to poles with a diameter of 600mm or less, and any permitted attachments to the poles.</u> 4. Any part of an above ground building or structure located within road reserve – No setback requirement.
<b>Commercial Zone</b>  <b>General Industrial Zone</b>	5. No setback requirement.
<b>NU-S3 Height for Above Ground Buildings and Structures</b>	
<b>Within road reserve or the rail corridor - All Zones</b>	1. Above ground buildings adjoining the General Residential Zone, Settlement Zone, Rural Lifestyle Zone or Large Lot Residential Zone (Coastal) must not exceed a height of 2.3m. 2. Above ground buildings adjoining any other zone must not exceed a height of 3.5m.  <i>Note: See standards below applying to above ground structures for the various zones (including where they are located within road reserve and the rail corridor).</i>
<b>General Residential Zone</b>  <b>Settlement Zone</b>  <b>Rural Lifestyle Zone</b>  <b>Large Lot Residential Zone (Coastal)</b>	3. Above ground buildings (where located outside road reserve and the rail corridor) must not exceed a height of 3.5m. 4. <u>Where an antenna is attached to a building, the top of the antenna must not be more than 5m above the point of the and building must not exceed a combined height of 8.5m to which it is attached.</u> 5. Above ground structures (poles, towers, and telecommunication poles, including combined height of pole and antenna) must not exceed a height of <u>11-513</u> m. <u>Except that:</u> <ol style="list-style-type: none"> <li>Omni directional ‘whip’ or dipole antenna that complies with the dimensions in Standard NU-S1 are excluded from the ‘combined height’ (i.e. only the pole needs to comply with the maximum structure height standard).</li> <li>Lightning rods <u>and GPS antennas</u> are exempt from the maximum structure height standard.</li> </ol>
<b>Rural Production Zone</b>  <b>General Rural Zone</b>	6. <u>Except as excluded in clause 4. below, a</u> Above ground buildings (where located outside road reserve and the rail corridor) must not exceed a height of 5m. <u>Except that:</u>

**Commented [JKS38]:** S117.048 Chorus, S118.048 Spark, S119.048 Vodafone - Hearing 7 Network Utilities, Key Issue 8

**Commented [JKS39]:** S117.049 Chorus, S118.049 Spark, S119.049 Vodafone - Hearing 7 Network Utilities, Key Issue 8

**Commented [JKS40]:** S117.049 Chorus, S118.049 Spark, S119.049 Vodafone - Hearing 7 Network Utilities, Key Issue 8

**Commented [JKS41]:** S117.049 Chorus, S118.049 Spark, S119.049 Vodafone - Hearing 7 Network Utilities, Key Issue 8

**Commented [JKS43]:** S117.049 Chorus, S118.049 Spark, S119.049 Vodafone - Hearing 7 Network Utilities, Key Issue 8

<p><b>Rural Lifestyle Zone</b></p>	<p>a. Where located within an Outstanding Natural Landscape or Outstanding Natural Feature identified in NFL-SCHED6, they must not exceed a height of 3m.</p> <p>7. <del>Except as excluded in Clause 4 below, w</del>Where an antenna is attached to a building, the <del>top of the antenna and building must not exceed a combined height 8.5m</del>be more than 5m above the point of <del>the building to which it is attached.</del></p> <p><del>Except that:</del></p> <p>a. <del>Where located within an Outstanding Natural Landscape or Outstanding Natural Feature identified in NFL-SCHED6, the antenna and building must not exceed a combined height of 6.5m.</del></p> <p>8. <del>Except as excluded in clause 4. below, a</del>Above ground structures (poles, towers and telecommunication poles, including combined height of pole and antenna) must not exceed a height of 25m. Except that:</p> <p>a. Omni directional 'whip' or dipole antenna that complies with the dimensions in Standard NU-S1 are excluded from the 'combined height' (i.e. only the pole needs to comply with the maximum structure height standard).</p> <p>b. Lightning rods <del>and GPS antennas</del>are exempt from the maximum structure height standard.</p> <p>9. Above ground buildings and structures in the Rural Production Zone must comply with Standard RPROZ-S13 Buildings and structures by Waipukurau Aerodrome.</p>	<p><b>Commented [JKS42]:</b> S117.049 Chorus, S118.049 Spark, S119.049 Vodafone - Hearing 7 Network Utilities, Key Issue 8</p> <p><b>Commented [JKS44]:</b> S117.049 Chorus, S118.049 Spark, S119.049 Vodafone - Hearing 7 Network Utilities, Key Issue 8</p> <p><b>Commented [JKS45]:</b> S117.049 Chorus, S118.049 Spark, S119.049 Vodafone - Hearing 7 Network Utilities, Key Issue 8</p> <p><b>Commented [JKS46]:</b> S117.049 Chorus, S118.049 Spark, S119.049 Vodafone - Hearing 7 Network Utilities, Key Issue 8</p>
<p><b>Commercial Zone</b></p> <p><b>General Industrial Zone</b></p>	<p>10. Above ground buildings (where located outside road reserve and the rail corridor) must not exceed a height of 5m.</p> <p>11. Where an antenna is attached to a building, the <del>top of the antenna and building must not be more than 5m above the point of the building to which it is attached</del>exceed a combined height 8.5m.</p> <p>12. Above ground structures (poles, towers, and telecommunication poles, including combined height of pole and antenna) must not exceed a height of <del>4.5m</del>17m.</p> <p>Except that:</p> <p>a. Omni directional 'whip' or dipole antenna that complies with the dimensions in Standard NU-S1 are excluded from the 'combined height' (i.e. only the pole needs to comply with the maximum structure height standard).</p> <p>b. Lightning rods <del>and GPS antennas</del>are exempt from the maximum structure height standard.</p>	<p><b>Commented [JKS47]:</b> S117.049 Chorus, S118.049 Spark, S119.049 Vodafone - Hearing 7 Network Utilities, Key Issue 8</p> <p><b>Commented [JKS48]:</b> S117.049 Chorus, S118.049 Spark, S119.049 Vodafone - Hearing 7 Network Utilities, Key Issue 8</p> <p><b>Commented [JKS49]:</b> S117.049 Chorus, S118.049 Spark, S119.049 Vodafone - Hearing 7 Network Utilities, Key Issue 8</p>
<p><b>NU-S4 Height in Relation to Boundary</b></p>		
<p><b>General Residential Zone</b></p>	<p>1. Above ground buildings or structures (except those located within road reserve) must not exceed a height of 2m plus the shortest</p>	

<b>Settlement Zone</b> <b>Rural Lifestyle Zone</b> <b>Large Lot Residential Zone (Coastal)</b> <b>Rural Production Zone</b> <b>General Rural Zone</b>	<p>horizontal distance between that part of the building or structure and the nearest site boundary (but excluding a road boundary).  Except that:</p> <p><u>a.</u> Where the nearest site boundary immediately adjoins an access or part of an access held in the same ownership (wholly or partly) as the site on which the above ground building or structure is located, or it adjoins a registered right of way in favour of the site of the building or structure, the height in relation to boundary must be measured from the far side of the access or right of way.</p> <p><u>a.b.</u> <u>This standard does not apply to poles with a diameter of 600mm or less, and any permitted attachments to the poles.</u></p> <p><i>Note: There is no height in relation to boundary standard that applies to above ground buildings and structures in the Commercial Zone, General Industrial Zone, or within road reserve.</i></p>
<b>NU-S5 Access, Parking and Loading</b>	
<b>All Zones</b>	1. Activities on sites greater than 200m <sup>2</sup> in area must comply with the relevant provisions of the TRAN – Transport chapter for access, parking and loading.
<b>NU-S6 Landscaping and Screening of Outdoor Areas and Parking Areas</b>	
<b>General Residential Zone</b> <b>Settlement Zone</b> <b>Rural Lifestyle Zone</b> <b>Large Lot Residential Zone (Coastal)</b> <b>Commercial Zone</b>	1. Outdoor storage areas and permanently formed parking areas (where required under Standard NU-S5) must be screened by: <ol style="list-style-type: none"> <li>a. Landscaping to a depth of 1m with a minimum average height of 1m at the time of planting and being capable of reaching a height of 1.8m; or</li> <li>b. Fencing to a maximum height of 1.8m; or</li> <li>c. A combination of both landscaping or fencing under clauses a. and b. above.</li> </ol>
<b>NU-S7 Radiofrequency Radiation</b>	
<b>All Zones</b>	1. If generating radio frequency fields, the activity must not exceed the maximum exposure level of the general public in New Zealand Standard NZS 2772.1:1999 Radiofrequency fields – Maximum exposure levels – 3kHz to 300GHz.

**Commented [JKS50]:** S117.050 Chorus, S118.050 Spark, S119.050 Vodafone, S90.024 Centralines - Hearing 7 Network Utilities, Key Issue 8.

**NU-S8 Electric and Magnetic Fields**

**All Zones**

1. If generating electric and magnetic fields, the activity must not exceed the International Commission on Non-ionising Radiation Protection Guidelines for limiting exposure to time varying electric and magnetic fields (1Hz – 100kHz) (Health physics, 2010, 99(6); 818-836) and recommendations from the World Health Organisation monograph Environment Health Criteria (N0 238, June 2007).

**NU-S9 Amateur Radio Configuration**

**General Residential Zone**  
**Settlement Zone**  
**Rural Lifestyle Zone**  
**Large Lot Residential Zone (Coastal)**

1. The maximum height of one support structure on a site must not exceed 20m (referred to hereafter as the 'primary structure').
2. The primary structure on the site may be surmounted by a VHF/UHF whip or discone antenna to a maximum height of 24m.
3. Any additional support structures on a site must not exceed a height of 12m.

*Note: in all instances, height is measured from the natural ground level.*

**Rural Production Zone**  
**General Rural Zone**  
**Commercial Zone**  
**General Industrial Zone**

4. Except as excluded in clause 5. below, one support structure on a site must not exceed a height of 20m (referred to hereafter as the 'primary structure').
5. The primary structure on the site may be surmounted by a VHF/UHF whip or discone antenna to a maximum height of 24m.
6. Any additional support structures on a site must not exceed a height of 14m.
7. Amateur radio configuration activities in the Rural Production Zone must comply with Standard RPROZ-S13 Buildings and structures by Waipukurau Aerodrome.
8. Amateur radio configuration activities in the Rural Production Zone must comply with Standard GIZ-S5 Buildings and structures by Waipukurau Aerodrome.

*Note: in all instances, height is measured from the natural ground level.*

**All Zones**

9. Except as required by clause 11. below, the primary structure and additional support structures must be set back a minimum distance of 1m from all boundaries.
10. All structures and support structures (including wire and **aerialsantennas**) must be contained within the site on which they are located and must not overhang any boundary.

**Commented [JKS51]:** Chorus (S117.003), Spark (S118.003) and Vodafone (S119.003) - Hearing Stream 7, Network Utilities, Key Issue 1

11. Any part of an amateur radio configuration activity must be set back from any item listed as a heritage item in HH-SCHED2 and/or Site of Significance identified in SASM-SCHED3 by a minimum distance of:
  - a. 100m in the Rural Production Zone, General Rural Zone and Rural Lifestyle Zone; and
  - b. 25m in all other zones.
12. The primary structure must comply with the following dimensions:
  - a. Guyed mast – a maximum inscribed circle of no more than 1m below 9m in height and 115mm above 9m in height to the maximum height specified (above) for primary structures in the zone where it is located; or
  - b. Guyed lattice mast – a maximum inscribed circle of no more than 1m below 9m in height and 0.4m above the 9m to the maximum height specified (above) for primary structures in the zone where it is located; or
  - c. Self-supporting lattice mast – a maximum inscribed circle of no more than 1m below 9m, and above 9m must fit within a tapering envelope with a maximum inscribed circle of 230mm at 9m and 115mm at 20m depending on the maximum height specified (above) for primary structures in the zone where it is located; or
  - d. Self-supporting tubular mast – a maximum inscribed circle of no more than 1m below 9m, and above 9m must fit into a tapering envelope with a maximum inscribed circle of 230mm at 9m and 115mm at 20m depending on the maximum height specified (above) for primary structures in the zone where it is located.
13. There must be no more than one primary structure per site.
14. Additional structures must comply with the following:
  - a. A maximum of 7 poles per site; and
  - b. Up to two additional structures per site may have an attached UHF or VHF ~~aerial/antenna~~, provided that the total height of the additional structures does not exceed the maximum height specified (above) for additional structures in the zone where they are located; and
  - c. No more than two dishes of up to 1.2m in diameter may be attached to each additional structure; and
  - d. One additional structure on a site may be a HF vertical antenna; and
  - e. All additional structures must have an outside diameter of 115mm or less; and
  - f. Where guy wires are used, there must not exceed a diameter of 12mm.
15. On each site, there must be no more than:
  - a. one dish of up to 2m in diameter;

Commented [JKS52]: Chorus (S117.003), Spark (S118.003) and Vodafone (S119.003) - Hearing Stream 7, Network Utilities, Key Issue 1



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|  | <ul style="list-style-type: none"> <li>b. one panel antenna of up to 2m in any dimension where it is positioned no more than 5m above natural ground level;</li> <li>c. two dishes, each being no more than 1.2m in diameter where located more than 5m above natural ground level; or</li> <li>d. one pedestal dish mounted antenna pivoted less than 3m above ground with a maximum diameter of 2.5m, provided that the pedestal and the antenna are located in accordance with the setback from neighbours/roads/rail network and height in relation to boundary standards applying to buildings in the zone in which they are located; or</li> <li>e. one pedestal dish mounted antenna pivoted less than 4m above ground with a maximum diameter of 5m, provided that: <ul style="list-style-type: none"> <li>i. the total height of the pedestal and the dish mounted antenna is more than 6.5m; and</li> <li>ii. the pedestal and the antenna are located in accordance with the setback from neighbours/roads/rail network and height in relation to boundary standards applying to buildings in the zone in which they are located.</li> </ul> </li> </ul> |
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### Assessment Matters

For Discretionary Activities, Council's assessment is not restricted to these matters, but it may consider them (among other factors).

#### **NU-AM1                    Infringement of the gross floor area and dimensions standards**

1. Whether the increase in floorspace and/or dimensions of the building or structure will cause visual dominance and/or adversely affect the character and amenity of adjoining properties and the surrounding environment.
2. Whether the network utility utilises an existing building or structure. As far as practicable, network utilities should co-site and share facilities.
3. Whether adverse effects on amenity values can be avoided, remedied, or mitigated through planting, fencing or other amenity treatment (including minimising visual impact through design and colours).

#### **NU-AM2                    Infringement of the setback standards**

1. Whether the reduced setback of the building or structure will cause shading or visual dominance and/or adversely affect the character and visual amenity of adjoining properties and, where relevant, within the existing streetscape and road frontage.
2. Whether the network utility utilises an existing building or structure. As far as practicable, network utilities should co-site and share facilities.

3. Whether adverse effects on amenity values can be avoided, remedied, or mitigated through planting, fencing or other amenity treatment (including minimising visual impact through design and colours).
4. Whether adverse effects on public health and safety, including on the functioning and safe operation of roads, cycleways or walkways, the rail corridor, the National Grid, or lines used for the conveyance of electricity or telecommunications, can be avoided, remedied, or mitigated, and the outcome of any consultation with the relevant road controlling authority, KiwiRail or Transpower.
5. Whether the dimensions of the site or other physical characteristics of the site preclude reasonable compliance.
6. Whether there are any characteristics or technical requirements of the proposed use that will make compliance impracticable.

**NU-AM3                    Infringement of the height standards and height in relation to boundary standards**

1. Whether the increased height of the building or structure will cause shading or visual dominance and/or adversely affect the character and visual amenity of adjoining properties and within the existing streetscape and road frontage.
2. Whether the network utility utilises an existing building or structure. As far as practicable, network utilities should co-site and share facilities.
3. Whether the health and safety of surrounding properties and occupiers will be maintained through the building or structure being located at an adequate distance from all property boundaries.
4. Whether the building or structure will be temporary in nature.
5. Whether the proposed building or structure will penetrate into any of the building height restriction areas shown on the Planning Maps for the Waipukurau Aerodrome.

**NU-AM4                    Infringement of the access, parking and loading standards**

1. Whether infringement of the parking and access standards will cause on-road congestion, including vehicle parking as a result of ingress and egress of vehicles to and from the site.
2. Whether on-site carparking and manoeuvring areas are adequate to meet the needs of the network utility.
3. Management of the effects of parking and access with regard to the assessment matters set out in TRAN-AM1 & TRAN-AM2.

**NU-AM5                    Infringement of the landscaping and screening standards**

1. The degree to which materials or equipment associated with the activity need to be stored outside the building, taking account of:
  - a. the nature, coverage area and height of materials or equipment; and
  - b. the time period over which materials or equipment are intended to be outside a building.
2. The degree to which provisions would be needed for:
  - a. security;

- b. control of litter and vermin; and
  - c. prevention or containment of fire hazard.
3. Where goods are not stored to the rear of a building or not screened from public view, the degree to which the outdoor storage will be compatible with the appearance, layout and functioning of other sites in the adjoining area, and the degree to which it will detract from the attractiveness of the site, as viewed from adjoining roads and sites.

**NU-AM6                    Infringement of the amateur radio configuration standards**

- 1. Whether the non-compliance with the bulk, form and scale, location and number of poles, ~~aerials, antennas~~ or associated supporting structures will lead to visual dominance and loss of visual amenity as viewed from adjoining properties and the surrounding neighbourhood. As part of this consideration will be given to effects on amenity on any habitable buildings and in particular the proximity and visibility of the amateur radio configuration to habitable rooms and outdoor living areas.
- 2. Whether the materials used and the finish of the materials, including the colour, will assist in mitigating effects.
- 3. Whether the location on the site and type of configuration chosen assists in mitigating visual effects.
- 4. Whether the proposal will reduce the ability to maintain access for maintenance, including buildings on adjoining sites.
- 5. Whether, in the case of pedestal antenna not complying with the height in relation to boundary standards in NU-S4, the proposal will result in the loss of sunlight and daylight to surrounding sites, particularly in relation to outdoor living areas or the main indoor living area windows of surrounding habitable buildings.

Commented [JKS53]: Chorus (S117.003), Spark (S118.003) and Vodafone (S119.003) - Hearing Stream 7, Network Utilities, Key Issue 1

**Methods**

Methods, other than the above rules, for implementing the policies:

**NU-M1                    Other Provisions in the District Plan**

Other sections of the District Plan contain additional rules and standards applying to buildings and structures:

- 1. HAZS – Hazardous Substances – controls the establishment of Major Hazardous Facilities in the District.
- 2. HH – Historical Heritage and HH-SCHED2 – Schedule of Historical Heritage Items – in areas containing these historical heritage sites.
- 3. SASM – Sites and Areas of Significance to Maori and SASM-SCHED3 – Schedule of Sites and Areas of Significance to Maori – in areas containing these sites of significance to tangata whenua.
- 4. TREE – Notable Trees and TREE-SCHED4 – Schedule of Notable Trees – in areas containing these notable trees.

5. ECO – Ecosystems and Indigenous Biodiversity and ECO-SCHED5 – Schedule of Significant Natural Areas – in areas containing these areas of significant indigenous vegetation or significant habitats of indigenous fauna.
6. ~~NFL – Natural Features and Landscapes and NFL-SCHED6 – Schedule of Outstanding Natural Features and Landscapes and Significant Amenity Features – in areas containing these features.~~
7. CE – Coastal Environment and CE-SCHED7 – Schedule of Areas of High Natural Character – in areas containing identified high natural character in the coastal environment.
8. RE – Renewable Energy sets direction for activities that convert renewable energy into electricity.
9. SUB – Subdivision – manages the control of subdivision of sites for the purpose of accommodating network utilities throughout the District.
10. EW – Earthworks – controls the effects of earthworks associated with activities on the environment.
11. TRAN - Transport – relevant to activities requiring vehicular access, parking and loading.
12. CL - Contaminated Land – contains planning controls that direct the requirement for consent or otherwise for activities on contaminated or potentially contaminated land.
13. OSR – Open Space and Recreation – includes provisions relevant to establishment of cycleways and walkways located outside road reserve (being recreational activities that fall within the definition of ‘community facilities’).
14. LIGHT – Light – controls light emissions associated with activities.
15. NOISE – Noise – controls noise associated with activities.
16. Designations – allow land to be secured for public works or other projects and facilitate the establishment of what are often necessary or essential services. Legal roads within the District, including State Highways, are designated.

Commented [JKS54]: S79.047 Transpower - Hearing 7 Network Utilities, Key Issue 9

**NU-M2**      ~~Resource Management (National Environmental Standards for Electricity Transmission Activities) Regulations 2009~~

These Regulations set out a national framework of permissions and consent requirements for activities on the existing high voltage electricity transmission network (the National Grid) that existed as of 14 January 2010. The regulations categorise activities that relate to the operation, maintenance, upgrading, relocation, or removal of existing transmission lines. The NES does not apply to electricity distribution lines - the lines that carry electricity from regional substations to electricity users, as these activities are covered under the District Plan provisions.

Commented [JKS55]: Clause 16(2) of the First Schedule of the RMA - minor amendment to correct title of NPS.

**NU-M3**      ~~Resource Management (National Environmental Standards for Telecommunication Facilities) Regulations 2016~~

These Regulations apply to telecommunications infrastructure, such as cabinets, antennas, poles, small-cell units, and telecommunications lines. In the case of conflict or perceived conflict with any provision of this plan, the NESTF provisions must prevail.

Commented [JKS56]: Clause 16(2) of the First Schedule of the RMA - minor amendment to correct title of NPS.

**NU-M4**      **Resource Management (National Policy Statement on Electricity Transmission) 2008**

This policy statement was promulgated in response to the need to operate, maintain, develop and upgrade the high voltage transmission network as a matter of national significance.

Commented [JKS57]: S79.049 Transpower - Hearing 7 Network Utilities, Key Issue 9

**NU-M5**      **Resource Management (National Policy Statement on Renewable Energy Generation) 2011**

The policy statement is intended to drive a consistent approach to planning for renewable electricity generation in New Zealand by giving clear government direction on the benefits of renewable electricity generation and requiring all councils to provide for it in their plans. The production of electricity will have a close relationship with the transmission of electricity from generators to substations.

Commented [JKS58]: Clause 16(2) of the First Schedule of the RMA - minor amendment to correct title of NPS.

**NU-M6**      **New Zealand Electrical Code of Practice for Electrical Distances 2001 (NZECP 34:2001)** **Safety-Safe**

The Code of Practice sets minimum safe electrical distance requirements for overhead electric line installations and other works associated with the supply of electricity from generating stations to end users. The minimum safe distances have been set primarily to protect persons, property, vehicles and mobile plant from harm or damage from electrical hazards.

Commented [JKS59]: S79.050 Transpower - Hearing 7 Network Utilities, Key Issue 9

**NU-M7**      **Electricity (Hazards from Trees) Regulations 2003**

The purpose of the Regulations is to protect the security of the supply of electricity, and the safety of the public, by prescribing distances from electrical conductors within which trees must not encroach, and sets rules about who has responsibility for cutting or trimming trees that encroach on electrical conductors.

**NU-M8**      **National Code of Practice for Utility Operators' Access to Transport Corridors**

The National Code of Practice for Utility Operators' Access to Transport Corridors. The Code of Practice will apply to the placement, maintenance, upgrading and removal of network utility structures in the road.

**NU-M9**      **Operating Code Standard for Pipelines – Gas and Liquid Petroleum (NZS/AS 2885)**

This Standard ensures safe separation distances are maintained when establishing rules and considering applications for buildings, structures, and other activities near the Gas Transmission Network.

## NU-M10 Engineering Code of Practice

The Engineering Code of Practice (Central Hawke's Bay District Council utilises the current Hastings District Council's Code of Practice 2011) – establishes guidelines for the design and construction of transport and service infrastructure which can be used as a means of compliance with the objectives, policies, and rules of the District Plan.

Commented [JKS60]: S89.008 CHBDC - Hearing 7  
Network Utilities, Key Issue 9

## NU-M11 Liaison

Consultation and communication with network utility operators.

### Principal Reasons

The principal reasons for adopting the policies and methods:

The objectives and policies of this chapter reflect the importance of, and the contribution made by, network utilities to the health and safety and overall social and economic wellbeing of the District's community. It is therefore critical that the safe, effective, secure and efficient development, operation, maintenance and upgrading of these services are appropriately provided for, and that the local, regional and national benefits that derive from them are recognised.

The development, operation, maintenance and upgrading of network utilities can adversely affect the environmental quality of the District, such as from noise and visual effects. In some cases, given the locational, functional, and operational constraints and requirements associated with some network utilities, it may not be entirely possible to avoid, remedy or mitigate all adverse effects associated with the development, operation, maintenance or upgrading of network utilities. In these circumstances, it needs to be recognised that some adverse effects on the surrounding environment may be unavoidable in order to achieve the benefits that network utilities provide.

The Plan therefore makes provision for network utilities while managing their potential adverse effects through performance standards, recognising the local environmental characteristics in the District. Certain types of network utilities and larger-scale utilities can have a broad range of potential adverse effects, and therefore it is more appropriate that these proposals are assessed through either the resource consent or designation processes. The District Plan encourages the co-siting, or sharing of facilities or sites, as this supports efficiencies and reduces the need for infrastructure to be located elsewhere in the District, in turn, mitigating or avoiding adverse effects.

Where incompatible activities have been allowed to establish too close to certain nationally or regionally significant network utilities (e.g. a dwelling allowed close to high voltage electricity transmission lines or an electricity substation), there is increased exposure to adverse effects such as the accumulation of dust on conductors, risk to structural integrity of pylons, restricted access for maintenance, and reduction in safety distances or public safety generally. Another example is locating a dwelling close to a wastewater treatment pond, which increases the potential for objectionable odour effects on the residents of the dwelling. To protect the

adjoining activities and the ongoing operation of the utilities, various degrees of control will be implemented in the District Plan to avoid or mitigate potential reverse sensitivity effects and ensure the network utility is not compromised.

Commented [JKS61]: S79.052 Transpower - Hearing 7 Network Utilities, Key Issue 9

### Anticipated Environmental Results

The environmental results anticipated from the policies and methods:

- NU-AER1** Safe, efficient and sustainable development, operation, maintenance and upgrading of network utilities throughout the District.
- NU-AER2** A District well-served by network utilities, while avoiding, remedying or mitigating significant adverse effects of them on the environment.
- NU-AER3** Protection of The safe, effectie, secure and efficient operation, maintenance, upgrading and development of network utilities is not constrained or compromised by subdivision, use and development from other land use activities which may adversely affect them.
- NU-AER4** Protection of the health and safety of residents.

Commented [JKS62]: Hearing Stream 7 - Right of Reply dated 27 January 2023 - in response to S81.058 Hort NZ