

Chapter 11 Utilities and Energy

The notified proposal is amended by our decision as follows.

Decision text from earlier decisions is shown in black text.

Text in blue is the decision text for the Central City proposal only.

Please note, to ensure clarity and certainty of provisions, and consistency with the Plan's drafting style, a number of changes have been made to our earlier decisions. These changes are not identified as it has not been practical to do so.

Chapter 11 Utilities and Energy

11.1 Introduction

This introduction is to assist the lay reader to understand how this chapter works and what it applies to. It is not an aid to interpretation in a legal sense.

This chapter relates to a range of utilities that may occur throughout the District. The objectives, policies, rules, standards and assessment criteria seek to provide for the operation, maintenance, upgrading and development of utilities, while also managing the potential adverse effects of utilities on the environment.

The provisions of this chapter also seek to avoid the potential adverse effects of other land uses and developments, including reverse sensitivity effects, on the operation, maintenance, upgrade and development of utilities.

The provisions in this chapter give effect to the Chapter 3 Strategic Directions Objectives.

11.2 Objectives and policies

11.2.1 Objective — Provision of utilities

- a. Effective and efficient provision of utilities in a manner that is integrated with land use and development in the District.
- b. The continued operation, maintenance, upgrade and development of utilities throughout the District.
- c. An increase in renewable electricity generation activities.

11.2.1.1 Policy — Sustainable water supply

- a. Achieve sustainability and resilience of the District's water supply by encouraging water conservation and the re-use and recycling of water.

11.2.1.2 Policy — Benefits of utilities

- a. [Require that new utilities are designed and constructed to maintain function should a significant seismic event or other natural hazard event occurring.](#)
- b. Recognise the national, regional and local benefits of the secure and efficient operation of utilities by providing for the operation, maintenance, upgrade and development of utilities.

11.2.1.3 Policy — Renewable electricity generation

- a. Provide for the operation, maintenance, upgrade and development of utilities that derive or generate electricity through renewable sources by:
 - i. recognising the benefits to people and communities of renewable electricity generation;
 - ii. acknowledging the implications and constraints associated with renewable generation activities, including locational, operational and technical matters;
 - iii. promoting small and community scale renewable electricity generation activities, such as from solar and wind energy;
 - iv. reducing the use of finite resources for the generation of electricity; and
 - v. [recognising the benefits of reducing greenhouse gas emissions that contribute to climate change](#)

11.2.1.4 Policy — Radiocommunications and telecommunications

[Deferral to Chapter 9 Natural and Cultural Heritage]

11.2.1.5 Policy — Electricity transmission and distribution

- a. Recognise the national significance of the National Grid by:
 - i. providing for the benefits derived from a secure and efficient electricity transmission network;
 - ii. providing for the operation, maintenance, upgrade and development of the National Grid;
 - iii. acknowledging that the management of adverse effects of the National Grid is constrained by technical and operational requirements; and
 - iv. having regard to the route, site and method selection when considering the effects of new infrastructure or major upgrades.
- b. Provide for ongoing operation, maintenance, upgrade and development of the electricity distribution network, while:
 - i. having particular regard to the post-earthquake repair and resilience requirements of the electricity distribution network.

11.2.1.6 Policy — Fuel facilities, storage and supply systems

Recognise the importance of operating, maintaining and developing a reliable and resilient fuel storage and supply system.

11.2.2 Objective — Adverse effects

- a. The adverse effects of new or upgraded utilities on other activities and the environment are managed, whilst having regard to the technical and operational requirements of utilities.
- b. The protection of utilities from the adverse effects of other activities.

11.2.2.1 Policy — Adverse effects of utilities

[Deferral to Chapter 9 Natural and Cultural Heritage]

11.2.2.2 Policy — Adverse effects on utilities

- a. Avoid adverse effects on utilities, including reverse sensitivity effects, that may compromise their operation, maintenance, upgrade and development.
- b. Avoid adverse effects, including reverse sensitivity effects, on the National Grid and the identified strategic electricity distribution lines, through the management of activities within an identified buffer corridor.

11.2.2.3 Policy — Radiofrequency, electric and magnetic fields

- a. Manage the potential adverse effects of radiofrequency, electric and magnetic fields associated with utilities.
- b. Avoid locating sensitive activities where there could be adverse effects from utilities that generate radio frequency, electric and magnetic fields.

11.3 How to interpret and apply the rules

- a. The rules that apply to all utilities in the District are contained in the activity status tables (including activity specific standards) in:
 - i. Rule 11.4;
 - ii. Rule 11.5;
 - iii. Rule 11.6;
 - iv. Rule 11.7; and
 - v. Rule 11.8.

Note: The activity standards in Rule 11.9 also apply to all activities listed in Rules 11.4–11.8.

- b. The rules in the zone chapters (13 – 21) do not apply to utilities, unless specified or referenced in this chapter.
- c. The activity status tables and standards in the following chapters also apply to all utilities in the District:
 - 5 Natural Hazards;
 - 6 General Rules and Procedures;
 - 7 Transport;
 - 8 Subdivision, Development and Earthworks;
 - 9 Natural and Cultural Heritage
 - 9.1 Indigenous Biodiversity and Ecosystems;
 - 9.3 Historic Heritage;
 - 9.4 Significant Trees;
 - 9.5 Ngāi Tahu Values and the Natural Environment; and
 - 9.6 Coastal Environment
 - 12 Hazardous Substances and Contaminated Land.

Chapter 5 (Natural Hazards) includes specific rules in relation to utilities in areas subject to hazards.

[Stage 3 — Chapter 9 Natural and Cultural Heritage]

- d. All telecommunications facilities operated by a network utility operator are controlled by the Resource Management (National Environmental Standards for Telecommunications Facilities)

Regulations 2008 (NESTF) in respect of the generation of radiofrequency fields. In the road reserve equipment cabinets, noise from these cabinets, and masts / antennas on existing structures are also controlled by the NESTF. Other telecommunications facilities or activities will be managed by the District Plan.

- e. The National Environmental Standards for Telecommunications Facilities Regulations 2008 manages instances where:
 - i. An original utility structure is replaced with a replacement utility structure;
 - ii. The addition of an antenna makes a structure into a replacement utility structure;
 - iii. If an antenna on a replacement utility structure is replaced; or
 - iv. A dish antenna is added to or replaced on an original utility structure or replacement utility structure.
- f. Under the NESTF, other telecommunications facilities or activities are managed by the District Plan:
 - i. Within the dripline of a tree or other vegetation where the trees or other vegetation are managed by the District Plan.
 - ii. On the same side of the road as items or land identified as having historic heritage values, where the land or items are identified by the District Plan.
 - iii. On the same side of the road as land or sites that are identified as having visual amenity values by the District Plan.
- g. The Resource Management (National Environmental Standards for Electricity Transmission Activities) Regulations 2009 (NESETA) contain a separate code of rules for the operation, maintenance, upgrading, relocation or removal of an existing transmission line, which is part of the National Grid, as defined in the regulations. Except as provided for by the regulation, no rules in this District Plan apply to such activities. Where an activity does not relate to an existing transmission line that is part of the National Grid, or where new transmission lines and associated structures are proposed, the District Plan provisions apply.
- h. Any application for resource consent for a controlled or restricted discretionary activity arising from the rules in this chapter shall not be publicly or limited notified. For any other application for resource consent, the Council may publicly or limited notify the application.
- i. Unless otherwise stated, a permitted activity includes operation of that activity.

11.4 Rules — Utilities and energy — General

11.4.1 Permitted activities — General

The activities listed below are permitted activities if they meet the activity specific standards set out in this table and the activity standards in Rule 11.9.

Activities may also be restricted discretionary, discretionary or non-complying as specified in Rules 11.4.2 to 11.4.4 and 11.5 to 11.8.

	Activity	Activity specific standards
P1	Construction or extension of any access tracks to utilities.	Nil <i>[Stage 3 — Chapter 9 Natural and Cultural Heritage]</i>
P2	Weather stations and navigation aids.	a. Weather stations and navigation aids greater than 1 metre in height or 6 m ² in area shall not be located within: <ol style="list-style-type: none"> i. a Character Area Overlay ii. <i>[Stage 3 — Chapter 9 Natural and Cultural Heritage]</i>
P3	Maintenance of a utility and the establishment of associated temporary structures, including vegetation trimming or removal.	Nil
P4	Utility cabinets as part of any utility, excluding any utility cabinet for electricity transmission or distribution provided for under Rule 11.5.1 P2.	a. The utility cabinet is located underground; or b. For above ground telecommunications cabinets, or those regulated by the NESTF, the maximum floor area shall be 2 m ² and the maximum height shall be 2 metres (measured from ground level or the top of a concrete plinth if there is one); and c. For above ground utility cabinets other than in standard (b) above, the maximum floor area shall be 10 m ² and the maximum height shall be 2.5 metres (measured from ground level or the top of a concrete plinth if there is one). d. For utility cabinets in the Avon River Precinct/Te Papa Ōtākaro Zone the maximum floor area shall be 5m ² and the maximum height shall be 3 metres.
P5	Utility buildings, excluding any utility buildings for electricity transmission or distribution provided for under Rule 11.5.1 P2.	a. Built form standards for the relevant zone.
P6	Installation of network utilities and ancillary equipment underground.	Nil

	Activity	Activity specific standards
P7	New lines and associated utility structures to provide electricity supplies to electric tramway trolley bus or rail systems.	Nil
P8	Utility structures for street lighting.	Nil
P9	Re-location of utilities.	a. The re-location must not be more than 2 metres measured horizontally, except that it may be more than 2 metres but not exceed 5 metres horizontally where it is associated with road widening or it is for safety reasons.
P10	Replacement of an existing utility structure or mast.	<p>a. The diameter or width of the replacement utility structure or mast at its widest point must not exceed twice that of the replaced utility structure or mast at its widest point.</p> <p>b. The height of the replacement utility structure or mast must not exceed whichever of the following is the greater height:</p> <ul style="list-style-type: none"> i. the height of the replaced utility structure or mast; or ii. the applicable maximum height for a building in the relevant zone. <p>c. The replaced utility structure or mast must be removed once the replacement structure or mast is in place.</p>
P11	Addition to an existing utility structure or mast.	<p>a. The combined diameter or width of the existing utility structure or mast plus the addition (at its widest point) must not exceed twice that of the pre-existing utility structure (at its widest point).</p> <p>b. The combined height of the existing utility structure or mast plus the addition must not exceed whichever of the following is the greater:</p> <ul style="list-style-type: none"> i. the pre-existing height of the existing utility structure or mast; or ii. the applicable maximum height for a building in the relevant zone.
P12	Replacement of an existing transmission or distribution tower.	<p>a. The replacement tower must not exceed the height of the replaced tower by more than 15%.</p> <p>b. Each side of the replacement tower's footprint must not be longer than the length of any side of the replaced tower's footprint plus 25% of the width of the replaced tower's footprint.</p> <p>c. The replaced tower must be removed once the replacement tower is in place.</p>

	Activity	Activity specific standards
P13	<p>An increase in the carrying or operating capacity, efficiency or security of electricity transmission or distribution lines, or telecommunication lines, by the following activities:</p> <ul style="list-style-type: none"> a. the addition of wires, cables, circuits and/or conductors; b. the re-conductoring of the line with higher capacity conductors; c. the re-sagging of conductors; d. the addition of longer or more efficient insulators; e. the addition of earth wires (which may contain telecommunication lines, earthpeaks and lightning rods); f. the replacement of above-ground ducts, cables and pipes up to a 50% increase in diameter; and g. the replacement of the utility. 	<ul style="list-style-type: none"> a. If the utility is replaced, the replacement utility must be of a similar scale and character to the structure that is replaced.
P14	<p>An increase in the carrying or operating capacity, efficiency or security of fuel and gas transmission or distribution lines, including the installation of isolation valves or other ancillary equipment, and the associated replacement of the utility.</p>	<ul style="list-style-type: none"> a. If the utility is replaced, the replacement utility must be of a similar scale and character to the structure that is replaced.
P15	<p>The installation of new mid-span electricity poles to address clearances required by New Zealand Electrical Code of Practice 34:2001.</p>	<p>Nil.</p>
P16	<p>Customer connections from and to buildings, facilities, structures and sites used for or serviced by utilities.</p>	<p>Nil.</p>
P17	<p>The attachment to existing bridges (except any bridge that is a structure identified in Appendix 9.3.6.1) of a pipe or cable for the conveyance of water, wastewater, stormwater, electricity, gas or fuel, or for telecommunications.</p>	<ul style="list-style-type: none"> a. Where the bridge is on publicly owned land and standard (b) does not apply, the pipe or cable: <ul style="list-style-type: none"> i. must be attached to the underside of the bridge or incorporated within the bridge structure or within an existing attached cable/pipe structure; or ii. must not exceed 100 mm in diameter. b. Where the bridge is on publicly owned land located in a Character Area Overlay, the pipe or cable: <ul style="list-style-type: none"> i. must be attached to the underside of the bridge or incorporated within the bridge structure or within an existing attached cable/pipe structure; or ii. must not exceed 63 mm in diameter, be

	Activity	Activity specific standards
		in a cluster of no more than two pipes, and be either the same colour as the bridge at the point of attachment or be of a matt finish colour with less than 20% reflectivity.
P18	Utility equipment within existing buildings.	Nil.
P19	Temporary utilities operating for less than 12 months, excluding emergency or back-up electricity generation permitted in Rule 11.6.1 P4.	<ul style="list-style-type: none"> a. Built form standards for the relevant zone. b. The noise standards in Rule 6.1.4 for the relevant zone.

11.4.2 Restricted discretionary activities — General

The activities listed below are restricted discretionary activities, provided they meet the activity standards in Rule 11.9

Decision to grant or decline consent and impose conditions is restricted to the matters of discretion set out in Rule 11.10, as set out in the following table.

	Activity	The Council's discretion shall be limited to the following matters:
RD1	Any activity listed in Rule 11.4.1 P2 that does not meet one or more of the activity specific standards.	<ul style="list-style-type: none"> a. Heritage and natural environment – Rule 11.10.1 b. Amenity, location and design – Rule 11.10.2
RD2	Any activity listed in Rule 11.4.1 P4 that does not meet one or more of the activity specific standards.	<ul style="list-style-type: none"> a. Heritage and natural environment – Rule 11.10.1 b. Amenity, location and design – Rule 11.10.2 c. Operational considerations – Rule 11.10.3 d. Health and safety – Rule 11.10.4
RD3	Any activity listed in Rule 11.4.1 P5 that does not meet one or more of the activity specific standards.	<ul style="list-style-type: none"> a. Heritage and natural environment – Rule 11.10. b. Amenity, location and design – Rule 11.10.2 c. Operational considerations – Rule 11.10.3 d. Health and safety – Rule 11.10.4(a)
RD4	Any activity listed in Rule 11.4.1 P17 that does not meet one or more of the activity specific standards.	<ul style="list-style-type: none"> a. Heritage and natural environment – Rule 11.10.1 b. Amenity, location and design – Rule 11.10.2(d) and (e) c. Operational considerations - 11.10.3 d. Electricity generation – 11.10.5(d), (e) and (h) e. Water, wastewater and stormwater – 11.10.6

11.4.3 Discretionary activities — General

The activities listed below are discretionary activities, provided they meet the activity standards in Rule 11.9.

Activity	
D1	Any activity not provided for as a permitted, restricted discretionary, discretionary or non-complying activity in Rules 11.4.1, 11.4.2 or 11.4.3 or in Rules 11.5 to 11.8.

11.4.4 Non-complying activities — General

The activities listed below are non-complying activities.

Activity	
NC1	Any activity that does not meet one or more of the activity standards for utilities in Rule 11.9.

11.5 Rules — Electricity transmission and distribution

11.5.1 Permitted activities — Electricity transmission and distribution

The activities listed below are permitted activities if they meet the activity specific standards set out in this table and the activity standards in Rule 11.9.

Activities may also be restricted discretionary, discretionary or non-complying as specified in Rules 11.4, 11.5.2, and 11.6 – 11.8.

	Activity	Activity specific standards
P1	New electricity transmission and electricity distribution lines and associated structures or equipment.	a. New above ground utilities shall not be located within: <ol style="list-style-type: none"> i. a Character Area Overlay ii. <i>[Stage 3 — Chapter 9 Natural and Cultural Heritage]</i> b. New utility structures or towers shall not exceed: <ol style="list-style-type: none"> i. 25 metres in height in the Rural, Specific Purpose (Lyttelton Port), Commercial and Industrial Zones, and any Transport Zone adjoining these zones; or ii. 15 metres in height in all other zones (including adjacent Transport Zones) iii. <i>[Stage 3 — Chapter 9 Natural and Cultural Heritage]</i>
P2	Transformers, substations, switching stations, kiosks, cabinets, and ancillary buildings.	a. The following built form standard for the relevant zone: <ol style="list-style-type: none"> i. daylight recession planes. b. The total floor area shall not exceed 10m ² . c. The maximum height shall not exceed 5.5 metres.

11.5.2 Restricted discretionary activities — Electricity transmission and distribution

The activities listed below are restricted discretionary activities, provided they meet the activity standards in Rule 11.9.

Decision to grant or decline consent and impose conditions is restricted to the matters of discretion set out in Rule 11.10, as set out in the following table.

	Activity	The Council's discretion shall be limited to the following matters:
RD1	Any activity listed in Rule 11.5.1 P1 that does not meet one or more of the activity specific standards.	a. Amenity, location and design – Rule 11.10.2 b. Operational considerations – Rule 11.10.3 c. Health and safety – Rule 11.10.4

	Activity	The Council's discretion shall be limited to the following matters:
		d. <i>[Stage 3 — Chapter 9 Natural and Cultural Heritage]</i>
RD2	Any activity listed in Rule 11.5.1 P2 that does not meet one or more of the activity specific standards.	<ul style="list-style-type: none"> a. Heritage and natural environment – Rule 11.10.1 b. Amenity, location and design – Rule 11.10.2 c. Operational considerations – Rule 11.10.3

11.6 Rules — Energy

11.6.1 Permitted activities — Energy

The activities listed below are permitted activities if they meet the activity specific standards set out in this table and the activity standards in Rule 11.9.

Activities may also be restricted discretionary, discretionary or non-complying as specified in Rules 11.4, 11.5, 11.6.2 - 11.6.4, 11.7 and 11.8.

	Activity	Activity specific standards
P1	Installation and operation of equipment for assessing a site for suitability for renewable electricity generation.	<ul style="list-style-type: none"> a. Equipment shall not be on a site for more than 12 months in any 36 month period. b. The noise standards in Rule 6.1.4 for the relevant zone. c. Equipment shall not be located within: <ul style="list-style-type: none"> i. a Character Area Overlay ii. <i>[Stage 3 — Chapter 9 Natural and Cultural Heritage]</i>
P2	Installation and operation of a solar cell or array of cells for the generation and use of electricity.	<ul style="list-style-type: none"> a. The electricity generated must be either: <ul style="list-style-type: none"> i. solely for use on the site as ancillary to the principal use of the site; or ii. for use on the site as ancillary to the principal use of the site and also for supply to not more than 20 residential units and/or industrial/commercial tenancies – subject to which, any excess may be contributed to the National Grid. b. The cell or array must be either incorporated into or mounted on the roof of a building. c. If the building breaches the daylight recession plane specified by the built standards for the relevant zone, the cell or array may also breach it provided that no cell protrudes more than 20 mm from the roof. d. If the building does not breach the daylight recession plane, the cell or array must not breach it either. e. There must not be a solar concentrator.
P3	Substations, transformers, or buildings ancillary to electricity generation equipment.	<ul style="list-style-type: none"> a. The daylight recession planes for the relevant zone. b. The total floor area shall not exceed 10 m². and c. The maximum height shall not exceed 5.5 metres.
P4	Emergency or back-up electricity generation that is not the primary electricity supply to the site.	<ul style="list-style-type: none"> d. The noise standards in Rule 6.1.4.2.2 for noise from emergency activities.
P5	Installation and operation of a wind turbine for the generation and use of	<ul style="list-style-type: none"> a. The electricity generated must be either: <ul style="list-style-type: none"> i. solely for use on the site as ancillary to the principal use

	Activity	Activity specific standards
	electricity on a site or sites in Rural or Industrial Zones.	<p>of the site; or</p> <p>ii. for use on the site as ancillary to the principal use of the site and also for supply to not more than 20 residential units (of a Rural or Residential Zone) and/or industrial/commercial tenancies (of an Industrial Zone)</p> <p>–</p> <p>subject to which, any excess may be contributed to the National Grid.</p> <p>b. If standard (a)(i) applies, no more than one wind turbine is to be erected on each site. If standard (a)(ii) applies, the wind turbines may be clustered on one or more of the sites.</p> <p>c. No above ground part of any wind turbine (including the full extent of blades) shall exceed a total height of 20 metres above the ground.</p> <p>d. The road boundary building setbacks and minimum building setbacks from internal boundaries of the relevant Rural or Industrial Zone apply. Compliance with this standard shall be to any above ground part of each wind turbine and the full extent of blades of each wind turbine.</p> <p>e. The noise standards in Rule 6.1.4 for the relevant Rural or Industrial Zone apply.</p> <p>f. <i>[Stage 3 — Chapter 9 Natural and Cultural Heritage]</i></p>
P6	Installation and operation of gas and fuel (including LPG) distribution or transmission pipelines, including necessary incidental equipment.	Nil.
P7	Tanks for the storage of gas, including LPG.	a. Built form standards for the relevant zone.

11.6.2 Restricted discretionary activities — Energy

The activities listed below are restricted discretionary activities, provided they meet the activity standards in Rule 11.9.

Decision to grant or decline consent and impose conditions is restricted to the matters of discretion set out in Rule 11.10, as set out in the following table.

	Activity	The Council's discretion shall be limited to the following matters:
RD1	Any activity listed in Rule 11.6.1 P1 that does not meet one or more of the activity specific standards.	<p>a. Amenity, location and design – Rule 11.10.2(a)</p> <p>b. Operational considerations – Rule 11.10.3(a)</p>
RD2	Any activity listed in Rule 11.6.1 P3 that does not meet one or more of the activity specific standards.	<p>a. Heritage and natural environment – Rule 11.10.1</p> <p>b. Amenity, location and design – Rule 11.10.2</p>

	Activity	The Council's discretion shall be limited to the following matters:
		<ul style="list-style-type: none"> c. Operational considerations – Rule 11.10.3 d. Health and safety – Rule 11.10.4(a) e. Electricity generation – Rule 11.10.5
RD3	Any activity listed in Rule 11.6.1 P4 that does not meet one or more of the activity specific standards.	<ul style="list-style-type: none"> a. Heritage and natural environment – Rule 11.10.1 b. Amenity, location and design – Rule 11.10.2 c. Operational considerations – Rule 11.10.3 d. Health and safety – Rule 11.10.4(a) e. Electricity generation – Rule 11.10.5
RD4	<p>Installation and operation of a wind turbine for the generation and use of electricity on a site or sites other than in Rural or Industrial Zones that meet the standards specified in paragraphs a. to f. of this Rule RD4:</p> <ul style="list-style-type: none"> a. If the electricity generated is solely for use on the site(s), not more than one wind turbine is to be erected on each site; and b. No above ground part of the wind turbine (including the full extent of blades) exceeds a total height of 20 metres above ground; and c. Each wind turbine meets the road boundary building setback and minimum building setback from internal boundaries of the relevant zone; and d. The noise standards for the relevant zone are met; and e. No wind turbine is located within a Character Area Overlay; and f. The electricity generated is either: <ul style="list-style-type: none"> i. solely for use on the site(s) as ancillary to the principal use of the site(s); or ii. for use on the site or sites as ancillary to the principal use of the site(s) and also for supply to not more than 20 residential units and/or industrial/commercial tenancies – <p>subject to which any excess may be contributed to the National Grid.</p>	<ul style="list-style-type: none"> a. Heritage and natural environment – Rule 11.10.1 b. Amenity, location and design – Rule 11.10.2(a) c. Operational considerations – Rule 11.10.3(a) d. Health and safety – Rule 11.10.4(a) e. Electricity generation – Rule 11.10.5(b) and (k)

	Activity	The Council's discretion shall be limited to the following matters:
RD5	Any activity listed in Rule 11.6.1 P2 that does not meet one or more of the activity specific standards (b)–(e).	<ul style="list-style-type: none"> a. Heritage and natural environment – Rule 11.10.1 b. Amenity, location and design – Rule 11.10.2 c. Operational considerations – Rule 11.10.3 d. Health and safety – Rule 11.10.4(a) e. Electricity generation – Rule 11.10.5
RD6	Any activity listed in Rule 11.6.1 P5 that does not meet one or more of the activity specific standards (b) – (e).	<ul style="list-style-type: none"> a. Heritage and natural environment – Rule 11.10.1 b. Amenity, location and design – Rule 11.10.2 c. Operational considerations – Rule 11.10.3 d. Health and safety – Rule 11.10.4(a) e. Electricity generation – Rule 11.10.5
RD7	Installation and operation of a utility and associated pipes and structures for the generation of energy using waste products.	<ul style="list-style-type: none"> a. Heritage and natural environment – Rule 11.10.1 b. Amenity, location and design – Rule 11.10.2 c. Operational considerations – Rule 11.10.3 d. Health and safety – Rule 11.10.4(a) e. Electricity generation – Rule 11.10.5 f. Water, wastewater and stormwater – Rule 11.10.6
RD8	Any activity listed in Rule 11.6.1 P7 that does not meet one or more of the activity specific standards.	<ul style="list-style-type: none"> a. Heritage and natural environment – Rule 11.10.1 b. Amenity, location and design – Rule 11.10.2 c. Operational considerations – Rule 11.10.3 d. Health and safety – Rule 11.10.4(a)

11.6.3 Discretionary activities — Energy

The activities listed below are discretionary activities, provided they meet the activity standards in Rule 11.9.

Activity	
D1	<p>Any activity listed in Rule 11.6.1 P2 that does not meet activity specific standard (a) where:</p> <ul style="list-style-type: none"> a. The activity occurs in the Rural, Commercial (other than in the Central City) or Industrial Zones and does not occur within the area covered by the Christchurch International Airport Protection Surfaces; and b. Any solar concentrator does not reflect light into a Residential Zone for more than 15 hours per annum. c. <i>[Stage 3 — Chapter 9 Natural and Cultural Heritage]</i>
D2	<p>Any activity listed in Rule 11.6.1 P5 that does not meet activity specific standard (a) where:</p> <ul style="list-style-type: none"> a. The activity occurs in the Rural Port Hills, Rural Templeton, Rural Urban Fringe, Rural Waimakariri, Rural Quarry or Rural Banks Peninsula Zones; and b. Noise levels comply with the limits prescribed in NZS6808:2010 (Acoustics – Wind Farm Noise). Noise levels shall be measured and assessed in accordance with NZS6808:2010. c. <i>[Stage 3 — Chapter 9 Natural and Cultural Heritage]</i>

Activity	
D3	Non-renewable electricity generation: <ol style="list-style-type: none"> a. In Industrial Zones; and b. Where the utility complies with the rules in Chapter 16 (Industrial) and noise rules in Chapter 6 (General Rules).

11.6.4 Non-complying activities — Energy

The activities listed below are non-complying activities.

Activity	
NC1	Any activity listed in Rule 11.6.1 P2 that does not meet activity specific standard (a) and is not provided for in Rule 11.6.3 D1.
NC2	Any activity listed in Rule 11.6.1 P5 that does not meet activity specific standard (a) and is not provided for in Rule 11.6.3 D2.
NC3	Non-renewable electricity generation activities not provided for in Rule 11.6.3 D3.

11.7 Rules — Communications facilities

11.7.1 Permitted activities — Communications facilities

The activities listed below are permitted activities if they meet the activity specific standards set out in this table and the activity standards in Rule 11.9.

Activities may also be restricted discretionary, discretionary or non-complying as specified in Rules 11.4 - 11.6, 11.7.2 and 11.8.

	Activity	Activity specific standards
P1	Freestanding communications utilities.	<p>a. Freestanding communications utilities shall not be located in:</p> <ul style="list-style-type: none"> i. a Character Area Overlay ii. <i>[Stage 3 — Chapter 9 Natural and Cultural Heritage]</i> <p>b. Any utility structure shall not exceed:</p> <ul style="list-style-type: none"> i. 25 metres in height (excluding lightning rods) and any head frame shall be no greater than 6 metres in diameter at its widest point in the Transport, Specific Purpose (Port), Industrial, Commercial or Rural Urban Fringe Zones; or ii. 35 metres in height (excluding lightning rods) and any head frame shall be no greater than 6 metres in diameter at its widest point in the Rural Waimakariri Zone; or iii. 30 metres in height (excluding lightning rods) and any head frame shall be no greater than 6 metres in diameter at its widest point in the Transport, Industrial, Commercial, or Rural Urban Fringe Zones, where two or more network utility operators utilise the same utility structure; or iv. 40 metres in height (excluding lightning rods) and any head frame shall be no greater than 6 metres in diameter at its widest point in the Rural Waimakariri Zone where two or more network utility operators utilise the same utility structure; or v. 20 metres in height (excluding lightning rods) and 1 metre in diameter above a height of 6 metres, except for any head frame which shall be no greater than 6 metres in diameter at its widest point in any other zone. <p>c. Any dish antenna shall be less than 1.8 metres in diameter in Industrial, Commercial or Rural Zones, and less than 0.8 metres in any other zone.</p> <p>d. Any other antenna shall not exceed a surface area of 1.5 m².</p>
P2	Communications utilities attached to a building, including ancillary equipment.	<p>a. Any dish antenna shall be less than 1.8 metres in diameter in the Industrial, Commercial or Rural Zones, and less than 0.8 metres in diameter in any other zone.</p> <p>b. Any other antenna shall not exceed a surface area of 1.5 m².</p>

	Activity	Activity specific standards
		c. Any antenna shall not exceed a height of 3 metres from the point of attachment or the height limit for the relevant zone, whichever is the greater.
P3	Amateur radio configurations.	<p>a. The top of any utility structure is less than 20 metres above ground level.</p> <p>b. Any antenna other than a simple wire dipole shall meet the following criteria:</p> <ul style="list-style-type: none"> i. Any of the elements making up the antenna shall not exceed 0.08m in diameter and 14.9m in length; ii. For horizontal HF yagi or loop antenna the boom length shall not exceed 13m; iii. No part of the antenna, utility structure or guy wires shall overhang the property boundary; and iv. Simple wire dipoles shall not overhang property boundaries. <p>c. Any dish antenna shall:</p> <ul style="list-style-type: none"> i. Be less than 5 metres in diameter/width; ii. Be pivoted less than 4 metres above the ground; and iii. If located in any Residential Zone, meet the minimum setback and daylight recession plane standards in Chapter 14.
P4	Communication kiosks.	<p>a. The maximum height of a communication kiosk shall be 2.5 metres (excluding any small cell or antenna permitted in clause (b) below), and the maximum volume shall be 2.4 m³.</p> <p>b. Any attached small cell or antennas shall be less than 1 metre in height and shall not have a horizontal dimension greater than the horizontal dimensions of the communication kiosk.</p>
P5	Installation of above ground lines and utility structures for communication utilities.	<p>a. New utilities shall not be located within a Character Area Overlay.</p> <p>b. The utility structures shall not exceed a height of:</p> <ul style="list-style-type: none"> i. 25 metres in the Rural, Specific Purpose (Lyttelton Port), Commercial, Industrial and any Transport Zones adjoining these zones; or ii. 15 metres in all other zones (including adjacent Transport Zones).

11.7.2 Restricted discretionary activities — Communications facilities

The activities listed below are restricted discretionary activities, provided they meet the activity standards in Rule 11.9.

Decision to grant or decline consent and impose conditions is restricted to the matters of discretion set out in Rule 11.10, as set out in the following table.

	Activity	The Council's discretion shall be limited to the following matters:
RD1	Any activity listed in Rule 11.7.1 P1 that does not meet one or more of the activity specific standards.	<ul style="list-style-type: none"> a. Heritage and natural environment – Rule 11.10.1 b. Amenity, location and design – Rule 11.10.2 c. Operational considerations – Rule 11.10.3
RD2	Any activity listed in Rule 11.7.1 P2 that does not meet one or more of the activity specific standards.	<ul style="list-style-type: none"> a. Heritage and natural environment – Rule 11.10.1 b. Amenity, location and design – Rule 11.10.2 c. Operational considerations – Rule 11.10.3
RD3	Any activity listed in Rule 11.7.1 P3 that does not meet one or more of the activity specific standards.	<ul style="list-style-type: none"> a. Heritage and natural environment – Rule 11.10.1 b. Amenity, location and design – Rule 11.10.2 c. Operational considerations – Rule 11.10.3
RD4	Any activity listed in Rule 11.7.1 P4 that does not meet the activity specific standard.	<ul style="list-style-type: none"> a. Heritage and natural environment – Rule 11.10.1 b. Amenity, location and design – Rule 11.10.2 c. Operational considerations – Rule 11.10.3
RD5	Any activity listed in Rule 11.7.1 P5 that does not meet one or more the activity specific standards.	<ul style="list-style-type: none"> a. Heritage and natural environment – Rule 11.10.1 b. Amenity, location and design – Rule 11.10.2 c. Operational considerations – Rule 11.10.3

11.8 Rules — Water, wastewater and stormwater

11.8.1 Permitted activities — Water, wastewater and stormwater

The activities listed below are permitted activities if they meet the activity specific standards set out in this table and the activity standards in Rule 11.9.

Activities may also be restricted discretionary, discretionary or non-complying as specified in Rules 11.4 – 11.7, and 11.8.2.

	Activity	Activity specific standards
P1	Water, wastewater and stormwater connections to public networks.	<p>Nil.</p> <p>Advice Notes:</p> <ol style="list-style-type: none"> 1. Refer to the Infrastructure Design Standard and/or Construction Specification Standard as published by the Council. 2. Connections to the Council's reticulated water supply are applied for through the "WS1 Water Connection Application form". 3. Connections to the Council's reticulated stormwater and wastewater systems are through the building consent process. Connections are to be installed by a Council Authorised Drain Layer.
P2	Construction or operation of structures for the conveyance, treatment, storage or retention / detention of water, wastewater and stormwater by the Council or a network utility operator.	<p>a. Built form standards for the relevant zone.</p> <p>Advice Notes:</p> <ol style="list-style-type: none"> 1. Refer to the Infrastructure Design Standard and/or Construction Specification Standard as published by the Council. 2. Refer also to relevant Stormwater Management Plans and Integrated Catchment Management Plans.
P3	Structures and equipment ancillary to the maintenance and operation of water, wastewater and stormwater facilities.	<p>Nil.</p> <p>Advice Notes:</p> <ol style="list-style-type: none"> 1. Refer to the Infrastructure Design Standard and/or Construction Specification Standard as published by the Council. 2. Refer also to the Canterbury Regional Council's Erosion and Sediment Control Guide. 3. Works should be undertaken in accordance with the best practicable option to minimise discharge. For guidance refer to the sediment control guidelines prepared by the Canterbury Regional Council. Works may also require consent from Canterbury Regional Council.
P4	Rainwater collection systems.	<p>a. Water tanks shall meet zone provisions for height and road boundary building setbacks and minimum building setbacks from internal boundaries.</p> <p>Advice note:</p>

	Activity	Activity specific standards
		1. The installation of rainwater tanks may require building consent.
P5	Solar hot water systems.	Nil. Advice note: 1. The installation of solar hot water systems may require building consent.

11.8.2 Restricted discretionary activities — water, wastewater and stormwater

The activities listed below are restricted discretionary activities, provide they meet the activity standards in Rule 11.9.

Decision to grant or decline consent and impose conditions is restricted to the matters of discretion set out in Rule 11.10, as set out in the following table.

	Activity	The Council's discretion shall be limited to the following matters:
RD1	Any activity listed in Rule 11.8.1 P2 that does not meet the activity specific standard.	<ul style="list-style-type: none"> a. Heritage and natural environment – Rule 11.10.1 b. Amenity, location and design – Rule 11.10.2 c. Operational considerations – 11.10.3 d. Health and safety – 11.10.4(a) e. Water, wastewater and stormwater – Rule 11.10.6
RD2	Any activity listed in Rule 11.8.1 P4 that does not meet the activity specific Standard.	<ul style="list-style-type: none"> a. Heritage and natural environment – Rule 11.10.1 b. Amenity, location and design – Rule 11.10.2 c. Operational considerations – Rule 11.10.3 d. Health and safety – Rule 11.10.4(a) e. Water, wastewater and stormwater – Rule 11.10.6(a)
RD3	Use of greywater collection systems (excluding those permitted by Rule 11.8.2 P2).	<ul style="list-style-type: none"> a. Water, wastewater and stormwater – Rule 11.10.6(a), (b) and (k) <p>Advice Notes:</p> <ul style="list-style-type: none"> 1. The installation of greywater systems may require building consent. 2. The use of greywater may require resource consent from the Canterbury Regional Council.

11.9 Rules — Activity standards — All activities

The following activity standards shall be met by all activities in Rules 11.4 – 11.8.

Applicable to	Activity Standard
<p>Any utilities that emit radiofrequency fields, which are not regulated by an amateur radio licence.</p>	<p>a. The utility operator must plan and operate the utility in accordance with NZS2772: Part 1:1999 Radiofrequency Fields Part 1 – Maximum Exposure Levels – 3 kHz to 300 GHz.</p> <p>b. The utility operator must ensure that the Council receives, before the utility becomes operational, the following:</p> <ol style="list-style-type: none"> i. written or electronic notice of where the utility is or where it is proposed to be; and ii. a report that— <ol style="list-style-type: none"> 1. is prepared in accordance with AS/NZS 2772.2:2011: Radiofrequency Fields Part 2: Principles and methods of measurement and computation – 3 kHz to 300 GHz and 2. takes account of exposures arising from other utilities in the vicinity of the utility; and 3. predicts whether the radiofrequency field levels at places in the vicinity of the utility that are reasonably accessible to the general public will comply with NZS 2772: Part 1:1999 Radiofrequency Fields Part 1 – Maximum Exposure Levels – 3 kHz to 300 GHz. <p>c. If the prediction referred to in standard (b) is that the radiofrequency field levels will reach or exceed 25% of the maximum level authorised by NZS 2772: Part 1:1999 Radiofrequency Fields Part 1 – Maximum Exposure Levels – 3 kHz to 300 GHz for exposure of the general public, the utility operator must ensure that the Council receives, within 3 months of the utility becoming operational, a report that—</p> <ol style="list-style-type: none"> i. is prepared in accordance with AS/NZS 2772.2:2011: Radiofrequency Fields Part 2: Principles and methods of measurement and computation – 3 kHz to 300 GHz; and ii. provides evidence that the actual radiofrequency field levels at places in the vicinity of the utility that are reasonably accessible to the general public comply with NZS 2772: Part 1:1999 Radiofrequency Fields Part 1 – Maximum Exposure Levels – 3 kHz to 300 GHz. <p>Advice Note:</p> <ol style="list-style-type: none"> 1. The exposure assessment in standard (b) is not required to include an evaluation of the uncertainty in that assessment.
<p>The operation of any utility that emits power frequency electric and magnetic fields.</p>	<p>a. Exposures to power frequency electric and magnetic fields in areas normally accessible to the public shall not exceed 5 kilovolts per metre and 200 microtesla as measured and assessed in accordance with the International Commission on Non-Ionising Radiation Protection Guidelines for Limiting Exposures to Time Varying Electric and Magnetic Fields (1Hz – 100kHz).</p> <p>Advice Note:</p>

Applicable to	Activity Standard
	<p>1. The Ministry of Health 2013 guidelines “Electric and Magnetic Fields and Your Health: Information on electric and magnetic fields association with transmission lines, distribution lines and electrical equipment – 2013 edition”, in addition to compliance with the exposure limits in standard (a), recommend:</p> <ul style="list-style-type: none"> - the implementation of very low cost measures to reduce exposures when constructing new electrical infrastructure, and; - when contemplating changes to existing sources, consideration of field reduction alongside safety, reliability and economic aspects.
Any utilities within 12 metres of the centre line of a 110kV or a 220 kV National Grid transmission line, or within 10 metres of the centre line of a 66 kV National Grid transmission line.	<p>a. The utility shall comply with the New Zealand Electrical Code of Practice for Electrical Safe Distances (NZCEP 34:2001).</p> <p>b. The utility shall not be for the reticulation or storage of water for irrigation purposes.</p>
Any utilities within 10 metres of the centre line of a 66kV electricity distribution line or within 5 metres of the centre line of a 33kV or the 11kV Heathcote to Lyttelton distribution line.	<p>a. The utility shall comply with the New Zealand Electrical Code of Practice for Electrical Safe Distances (NZCEP 34:2001).</p>

11.10 Rules — Matters of discretion

When considering applications for restricted discretionary activities, the Council's discretion to grant or decline consent, or impose conditions, is restricted to the matters over which discretion is restricted in the relevant rule and as described below.

11.10.1 Heritage and natural environment

- a. Any cumulative visual effects arising from the utility, particularly in relation to telecommunication facilities and energy generation facilities; and
- b. If any activity is proposed within a Character Area Overlay, any relevant assessment matters in Chapter 14; and
- c. *[Stage 3 — Chapter 9 Natural and Cultural Heritage]*

11.10.2 Amenity, location and design

- a. The practicality and effectiveness of screening the utility;
- b. In respect of utilities attached to buildings, whether the utility is placed within the visual envelope of an existing building, and the extent to which the colour and design of the facility corresponds to the existing building;
- c. Consideration of the number and size of any other existing utility on the building;
- d. The extent to which any adverse effects of the utility have been avoided, remedied or mitigated by the route, site and method selection; and
- e. Whether the location and size of the utility impacts on the ability of people to access any facility, building, shop, recreation facility or other activity on a site.

11.10.3 Operational considerations

- a. The extent to which the scale and height of buildings or other structures proposed are necessary to meet the technical, operational or functional requirements of the utility;
- b. Consideration of soil stability, erosion, and geotechnical matters on the selection of the route or site of a utility and the extent to which these matters can be mitigated;
- c. Whether placing lines or other utilities underground is unreasonable in terms of additional costs or environmental effects; and
- d. Any risk to, and effects on, the operation, maintenance, upgrading and development of transmission lines, including the National Grid.

11.10.4 Health and safety

- a. Whether the utility will be located in close proximity to any sensitive activity and the extent of any effect on human health.

11.10.5 Electricity generation

- a. Whether the utility will make a meaningful contribution to renewable electricity generation targets set by central government (90% by 2025) and the Council's Climate Smart Strategy 2010 - 2025.
- b. The distance between the utility and residences, public places, or places from which the utility would be visible, and whether the utility would impose adverse visual effects on or dominate the surrounding landscape... [*Deferral to Chapter 9 Natural and Cultural Heritage*];
- c. Whether views to the utility are expansive or constrained;
- d. The extent to which the siting and size of the utility responds to its landscape context;
- e. The relative elevation of the utility in relation to residences, public places or place from which the utility will be visible, including whether the utility is located on a ridgeline or series of ridgelines, or would form part of a skyline;
- f. Number, design and extent of wind turbines and associated structures, and predominant orientation in relation to the landform;
- g. The effects on natural topography, landforms and geological forms;
- h. The ecological effects including any loss of indigenous flora, fauna, habitat and riparian margins, including through birdstrike;
- i. The extent of and effect on adjoining land uses of noise levels, noise modulation, glint/glare, and shadow flicker;
- j. The need to locate wind turbines and associated structures where the wind resource is available and the quality of the wind resource;
- k. The extent and visibility of roads, earthworks and vegetation clearance associated with the construction, operation or maintenance of the utility;
- l. For solar cells, in addition to the above:
 - i. the time of day, year, and time per day when adjoining or adjacent properties would be affected by reflected solar glare and the degree of luminance;
 - ii. the number of properties affected and their relative proximity; and
 - iii. whether there is any glare hazard.
- m. The necessity for non-renewable electricity generation elements in the District's electricity supply network, including for building resilience.

11.10.6 Water, wastewater and stormwater

- a. The requirements of the Infrastructure Design Standard and/or Construction Standard Specifications as published by the Council;
- b. Whether the proposed servicing will serve its intended purpose;
- c. Whether the utility utilises the existing or proposed topography and proposed networks to convey surface water by way of gravity systems;
- d. Whether provision is made for safe access for maintenance of surface water infrastructure;
- e. Whether the utility incorporate existing or new appropriate indigenous vegetation, recognising the ability of particular species to absorb water, and to which planting reflects Ngāi Tahu history and identity associated with specific place;
- f. The suitability of the proposed water supply for fire-fighting purposes (the Council may obtain a report from the Chief Fire Officer), including the extent of compliance with the SNZ PAS:4509:2008 in respect of the health and safety of the community, including neighbouring properties;
- g. The extent to which the proposed surface water management systems are consistent with the relevant Council Stormwater Management Plan or Integrated Catchment Management Plan;
- h. Any adverse effects on the functioning or values of the existing network of drains, springs, waterways and ponding areas;
- i. The provision for, and protection of, the flood storage and conveyance capacity of waterways.
- j. Whether the proposed ponding area will be attractive to birdlife that might pose a bird strike risk to the operation of Christchurch International Airport Limited; and
- k. The requirements of AS/NZS 1547:2000.