

## 30 Energy and Utilities

### Purpose

Energy and Utilities are of strategic importance and require a coordinated approach in relation to the development of energy resources, the generation and transmission of electricity and the provision of essential infrastructure throughout the District.

#### 30.1.1 Energy

Energy resources play a key role in the socio-economic wellbeing and growth of the District. Local energy needs may change over time and are dependent on the scale of demand, as well as measures to reduce demand through energy efficiency, conservation and small scale renewable generation.

In the future, there may be a need for new generation sources to meet demand. Electricity generation by renewable energy sources is desired over non-renewable sources and this is reinforced in the National Policy Statement on Renewable Electricity Generation 2011. The generation of electricity from non-renewable sources is generally discouraged. However, standby generation may be necessary for essential public, civic, community and health functions, or in areas not connected to the electricity distribution network.

Energy efficiency and conservation go hand in hand with renewable energy. Conserving the use of energy together with the generation of renewable energy will be vital in responding to the challenges of providing enough energy to meet future energy needs and reducing greenhouse gas emissions. Small and community scale generation is encouraged and advantages of solar energy within the District are recognised. The benefits of solar energy may be realised through site design methods which promote solar efficient design, in addition to the inclusion of solar photovoltaic panels and solar hot water heating systems within buildings. Sustainable building forms which reduce energy demand and minimise heating costs are encouraged, including use of the Homestar™ rating system for residential buildings and Green Star tool for commercial buildings.

#### 30.1.2 Utilities

Utilities are essential to the servicing and functioning of the District. Utilities have the purpose to provide a service to the public and are typically provided by a network utility operator.

Due to the importance of utilities in providing essential services to the community, their often high capital cost to establish, and their long life expectancy, the need for the establishment and on-going functioning, maintenance and upgrading of utilities is recognised. The need to operate, maintain, develop and upgrade the National Grid is a matter of national significance established by the National Policy Statement on Electricity Transmission 2008. In addition, some utilities have specific locational needs that have to be accommodated for their operation. The co-location of utilities may achieve efficiencies in design and operation, reduce capital investment costs and also minimise amenity and environmental effects. The ability to co-locate compatible uses should be considered for all utility proposals.

It is recognised that while utilities can have national, regional and local benefits, they can also have adverse effects on surrounding land uses, some of which have been established long before the network utility. The sustainable management of natural and physical resources requires a balance between the effects of different land uses. However, it is also necessary that essential utilities are protected, where possible, from further encroachment by incompatible activities which may lead to adverse effects including reverse sensitivity effects. This chapter therefore also addresses requirements for sensitive uses and habitable buildings located near to utilities.

Utilities are also required for the purpose of the protection of the community from natural hazards. The provisions in this Chapter address structures and works required for the purpose of natural hazard mitigation, while Chapter 28 (Natural Hazards) focuses on the consequences of subdivision, use and development on, and the natural hazard risk to, those activities.

## 30.2 Objectives and Policies

### Energy

**30.2.1 Objective - The sustainable management of the District's resources benefits from the District's renewable and non-renewable energy resources and the electricity generation facilities that utilise them.**

### Policies

30.2.1.1 Recognise the national, regional and local benefits of the District's renewable and non-renewable electricity generation activities.

30.2.1.2 Enable the operation, maintenance, repowering, upgrade of existing non-renewable electricity generation activities and development of new ones where adverse effects can be avoided, remedied or mitigated.

**30.2.2 Objective - The use and development of renewable energy resources achieves the following:**

- a. It maintains or enhances electricity generation capacity while avoiding, reducing or displacing greenhouse gas emissions;
- b. It maintains or enhances the security of electricity supply at local, regional and national levels by diversifying the type and/or location of electricity generation;
- c. It assists in meeting international climate change obligations;
- d. It reduces reliance on imported fuels for the purpose of generating electricity;
- e. It helps with community resilience through development of local energy resources and networks.

### Policies

30.2.2.1 Enable the development, operation, maintenance, repowering and upgrading of new and existing renewable electricity generation activities, (including small and community scale), in a manner that:

- a. recognises the need to locate renewable electricity generation activities where the renewable electricity resources are available;
- b. recognises logistical and technical practicalities associated with renewable electricity generation activities;
- c. provides for research and exploratory-scale investigations into existing and emerging renewable electricity generation technologies and methods.

30.2.2.2 Enable new technologies using renewable energy resources to be investigated and established in the district.

**30.2.3 Objective - Energy resources are developed and electricity is generated, in a manner that minimises adverse effects on the environment.**

**Policies**

30.2.3.1 Promote the incorporation of Small and Community-Scale Distributed Electricity Generation structures and associated buildings (whether temporary or permanent) as a means to improve efficiency and reduce energy demands.

30.2.3.2 Ensure the visual effects of Wind Electricity Generation do not exceed the capacity of an area to absorb change or significantly detract from landscape and visual amenity values.

30.2.3.3 Promote Biomass Electricity Generation in proximity to available fuel sources that minimise external effects on the surrounding road network and the amenity values of neighbours.

30.2.3.4 Assess the effects of Renewable Electricity Generation proposals, other than Small and Community Scale with regards to:

- a. landscape values and areas of significant indigenous flora or significant habitat for indigenous fauna;
- b. recreation and cultural values, including relationships with tangata whenua;
- c. amenity values;
- d. the extent of public benefit and outcomes of location specific cost-benefit analysis.

30.2.3.5 Existing energy facilities, associated infrastructure and undeveloped energy resources are protected from incompatible subdivision, land use and development.

30.2.3.6 To compensate for adverse effects, consideration must be given to any offset measures (including biodiversity offsets) and/or environmental compensation including those which benefit the local environment and community affected.

30.2.3.7 Consider non-renewable energy resources including standby power generation and Stand Alone Power systems, with particular regard to servicing activities in remote locations, and where adverse effects can be mitigated.

**30.2.4 Objective - Subdivision layout, site layout and building design takes into consideration energy efficiency and conservation.**

**Policies**

30.2.4.1 Encourage energy efficiency and conservation practices, including use of energy efficient materials and renewable energy in development.

30.2.4.2 Encourage subdivision and development to be designed so that buildings can utilise energy efficiency and conservation measures, including by orientation to the sun and through other natural elements, to assist in reducing energy consumption.

30.2.4.3 Encourage Small and Community-Scale Distributed Electricity Generation and Solar Water Heating structures within new or altered buildings.

- 30.2.4.4 Encourage building design which achieves a Homestar™ certification rating of 6 or more for residential buildings, or a Green Star rating of at least 4 stars for commercial buildings.
- 30.2.4.5 Transport networks should be designed so that the number, length and need for vehicle trips is minimised, and reliance on private motor vehicles is reduced, to assist in reducing energy consumption.
- 30.2.4.6 Control the location of buildings and outdoor living areas to reduce impediments to access to sunlight.

### Utilities

**30.2.5 Objective - The growth and development of the District is supported by utilities that are able to operate effectively and efficiently.**

### Policies

- 30.2.5.1 Utilities are provided to service new development prior to buildings being occupied, and activities commencing.
- 30.2.5.2 Ensure the efficient management of solid waste by:
- a. encouraging methods of waste minimisation and reduction such as re-use and recycling;
  - b. providing landfill sites with the capacity to cater for the present and future disposal of solid waste;
  - c. assessing trends in solid waste;
  - d. identifying solid waste sites for future needs;
  - e. consideration of technologies or methods to improve operational efficiency and sustainability (including the potential use of landfill gas as an energy source);
  - f. providing for the appropriate re-use of decommissioned landfill sites.
- 30.2.5.3 Recognise the future needs of utilities and ensure their provision in conjunction with the provider.
- 30.2.5.4 Assess the priorities for servicing established urban areas, which are developed but are not reticulated.
- 30.2.5.5 Ensure reticulation of those areas identified for urban expansion or redevelopment is achievable, and that a reticulation system be implemented prior to subdivision.
- 30.2.5.6 Encourage low impact design techniques which may reduce demands on local utilities.
- 30.2.6 Objective - The operation, maintenance, development and upgrading of utilities supports the well-being of the community.**

### Policies

- 30.2.6.1 Provide for the operation, maintenance or upgrading of utilities to ensure their on-going viability and efficiency.

- 30.2.6.2 When considering the effects of proposed utility developments consideration must be given to alternatives, and also to how adverse effects will be managed through the route, site and method selection process, while taking into account:
- a. the locational, technical and operational requirements of the utility (including in the case of Regionally Significant Infrastructure functional needs and operational needs); and
  - b. the benefits associated with the utility.
- 30.2.6.3 Ensure that the adverse effects of utilities on the environment are managed while taking into account the positive social, economic, cultural and environmental benefits that utilities provide, including:
- a. enabling enhancement of the quality of life and standard of living for people and communities;
  - b. providing for public health and safety;
  - c. enabling the functioning of businesses;
  - d. enabling economic growth;
  - e. enabling growth and development;
  - f. protecting and enhancing the environment;
  - g. enabling the transportation of freight, goods, people;
  - h. enabling interaction and communication.
- 30.2.6.4 Encourage the co-location of facilities where operationally and technically feasible.
- 30.2.6.5 Manage land use, development and/or subdivision in locations which could compromise the safe and efficient operation of utilities.
- 30.2.7 Objective - The adverse effects of utilities on the surrounding environment are avoided or minimised (in the case of Regionally Significant Infrastructure also having regard to functional needs and operational needs).**

#### Policies

- 30.2.7.1 Manage the adverse effects of utilities on the environment by:
- a. for utilities other than the National Grid, Electricity Sub-Transmission Infrastructure and Significant Electricity Distribution Infrastructure:
    - i. avoiding their location on sensitive sites, including heritage and special character areas, Outstanding Natural Landscapes and Outstanding Natural Features, and skylines and ridgelines except where no other location is practicable; and
    - ii. where avoidance is not practicable, avoiding significant adverse effects and minimising other adverse effects of those utilities on those sites, areas, landscapes or features.
  - b. encouraging co-location or multiple use of network utilities where this is efficient and practicable in order to avoid, remedy or mitigate adverse effects on the environment;

- c. ensuring that redundant utilities are removed;
- d. using landscaping and or colours and finishes to reduce visual effects;
- e. integrating utilities with the surrounding environment; whether that is a rural environment or existing built form.

30.2.7.1A Manage the adverse effects of the upgrading (other than minor upgrading) or development of the National Grid, Electricity Sub-Transmission Infrastructure and Significant Electricity Distribution Infrastructure within Scheduled Significant Natural Areas, areas that meet the criteria in Policy 33.2.1.8, and heritage features identified as Category 1 in the Schedule in Chapter 26 by:

- a. protecting the Scheduled Significant Natural Areas and Category 1 Heritage Features; or
- b. where the functional needs or operational needs of the National Grid, Electricity Sub-Transmission Infrastructure or Significant Electricity Distribution Infrastructure make that protection impracticable, minimise loss of the values that are protected or harm to the Scheduled Significant Natural Areas and Category 1 Heritage Features by:
  - i. avoiding any location that would fail to protect the values of Scheduled Significant Natural Areas and Category 1 Heritage Features if there is a practicable alternative location that would provide for the functional needs or operational needs of the National Grid, Electricity Sub-Transmission Infrastructure or Significant Electricity Distribution Infrastructure;
  - ii. if avoiding the location is not practicable due to those functional needs or operational needs, avoiding any adverse effects on the values of Scheduled Significant Natural Areas and Category 1 Heritage Features;
  - iii. where adverse effects cannot be fully avoided, applying a sequential management approach to those effects that gives first priority to their minimisation, second priority to remediating what cannot practicably be minimised, and third priority to mitigating as far as practicable what adverse effects then remain for the Scheduled Significant Natural Areas and Category 1 Heritage Features; and
  - iv. in the case of any residual adverse effects on indigenous biodiversity values that remain following each of those steps, considering offsetting and environmental compensation.

30.2.7.1B Manage the adverse effects of the upgrading (other than minor upgrading) or development of the National Grid, Electricity Sub-Transmission Infrastructure and Significant Electricity Distribution Infrastructure within Wāhi Tūpuna, Special Character Areas identified on the District Plan maps including the Arrowtown Residential Historic Management Zone and other Heritage features, settings, overlays or precincts not identified in Policy 30.2.7.1A by:

- a. in the case of Wāhi Tūpuna, undertaking prior consultation with Manawhenua;
- b. protecting the Wāhi Tūpuna, Special Character Area or Heritage feature; or
- c. where that is impracticable because of the functional needs or operational needs of the National Grid, Electricity Sub-Transmission Infrastructure or Significant

Electricity Distribution Infrastructure, minimising loss of the values that are protected ~~protection~~ and harm by:

- i. avoiding any location that would fail to protect the Wāhi Tūpuna, Special Character Area or Heritage feature; and
- ii. if avoiding the location is impracticable, avoiding to the extent practicable any adverse effects on Manawhenua values in the case of Wāhi Tūpuna and on the values and attributes of the Special Character Area or Heritage feature;
- iii. for any remaining adverse effect not able to be practicably avoided, reducing the nature and extent of that effect as far as practicable, remediating what then remains to the extent practicable and mitigating any residual such effect.

30.2.7.2 Require the undergrounding of new utilities servicing new areas of development, other than the National Grid, where technically feasible.

30.2.7.3 Encourage the replacement of existing overhead services other than the National Grid, with underground reticulation or the upgrading of the existing overhead services, where technically feasible.

30.2.7.4 Take account of economic and operational needs in assessing the location and external appearance of utilities.

### 30.2.8 Objective -

- a. **The benefits of a secure and sufficient electricity supply to the District are realised by effective operation, maintenance, upgrade and development of the National Grid;**
- b. **Adverse effects of the operation, maintenance, upgrade and development of the National Grid on the environment are effectively managed;**
- c. **Adverse effects of activities on the operation, maintenance, upgrade and development of the National Grid are effectively managed.**

### Policies

30.2.8.1 Enable the operation, maintenance and minor upgrading of the National Grid.

30.2.8.2 Recognise that the provision of a secure and sufficient electricity supply to the District is likely to require National Grid assets to be located within the District's distinctive landscapes or natural environments, or areas of cultural or historic significance.

30.2.8.2A When considering the environmental effects of upgrading, (other than minor upgrading) or development of the National Grid regard is to be given to the following matters:

- a. the extent to which adverse effects have been avoided as a priority;
- b. the extent to which the functional needs and operational needs of the National Grid constrain the ability to avoid, or impose restrictions on remedying or mitigating, adverse effects;
- c. the extent to which adverse effects have been avoided, remedied or mitigated, including by the route, site or method selection;

- d. when the structures, lines and other network infrastructure of the National Grid are to be located on an Outstanding Natural Feature or in an Outstanding Natural Landscape or Rural Character Landscape, the landscape capacity of those areas to accommodate the upgrading or development of the National Grid;
- e. opportunities to reduce existing effects on sensitive activities;
- f. offsetting of residual adverse effects on indigenous biological diversity; and
- g. the need for environmental compensation to address any more than minor residual adverse effects on indigenous biological diversity.
- h. when the structures lines and other network infrastructure of the National Grid are to be located in the Gibbston Character Zone or Wakatipu Basin Rural Amenity Zone, the extent to which effects are minimised, including Policy 24.2.1.8, by the choice of method, location and design of the National Grid and that residual effects may remain.

#### 30.2.8.3 Manage adverse effects on the National Grid by:

- a. only allowing new or extended buildings, structures and earthworks in the National Grid Yard where they will not compromise the operation, maintenance, upgrade and development of the National Grid;
- b. avoiding National Grid Sensitive Activities within the National Grid Yard and, to the extent reasonably possible, managing activities to avoid reverse sensitivity effects on the National Grid;
- c. managing potential electrical hazards, and the adverse effects of buildings, structures and National Grid Sensitive Activities on the operation, maintenance, upgrade and development of the Frankton Substation; and
- d. managing subdivision within the National Grid Subdivision Corridor to avoid reverse sensitivity effects and to ensure that the National Grid is not compromised.

#### **30.2.9 Objective – Natural hazard mitigation structures and works that are required to reduce risk to people, property, and the community are enabled in a manner that minimises adverse effects on the environment.**

##### **Policies**

30.2.9.1 Enable the repair and maintenance of natural hazard mitigation structures, facilities, and plant required for the protection of the community.

30.2.9.2 Provide for natural hazard mitigation structures and works that are required to reduce risk to people, property and the community while:

- a. seeking to avoid significant adverse effects;
- b. where there is no reasonable alternative and avoidance of significant adverse effects is not practicable, remedying or mitigating adverse effects; and
- c. minimising other adverse effects.

30.2.9.3 Minimise any displacement of natural hazard risk off-site that may result from natural hazards mitigation structures and works.



- 30.2.9.4 Encourage natural hazard mitigation structures and works that result in low residual risk from natural hazards.
- 30.2.9.5 Recognise that natural hazard mitigation structures and works may have a functional need to locate within sensitive areas, with the potential for adverse effects on the values of those sensitive areas, including:
  - a. Significant Natural Areas, including other areas that meet the criteria for significance in Policy 33.2.1.8;
  - b. heritage features, heritage precincts, heritage overlay areas and protected trees;
  - c. overlays and zones with special character areas including the Queenstown, Wānaka and Arrowtown town centres and the Arrowtown Residential Historic Management Zone;
  - d. Outstanding Natural Landscapes and Outstanding Natural Features;
  - e. Rural Character Landscape and other amenity landscapes;
  - f. lakes, rivers and their margins;
  - g. Wāhi tūpuna; and
  - h. Open Space and Recreation Zones.

**30.3 Other Provisions and Rules**

**30.3.1 District Wide**

Attention is drawn to the following District Wide Chapters.

1 Introduction	2 Definitions	3 Strategic Direction
4 Urban Development	5 Tangata Whenua	6 Landscapes and Rural Character
25 Earthworks	26 Historic Heritage	27 Subdivision
28 Natural Hazards	29 Transport	31 Signs
32 Protected Trees	33 Indigenous Vegetation	34 Wilding Exotic Trees
35 Temporary Activities and Relocated Buildings	36 Noise	37 Designations
District Plan web mapping application		

**30.3.2 Information on National Environmental Standards and Regulations**

- a. Resource Management (National Environmental Standard for Electricity Transmission Activities) Regulations 2009:

Notwithstanding any other rules in the District Plan, the National Grid existing as at 14 January 2010 is covered by the Resource Management (National Environmental Standard for Electricity Transmission Activities) Regulations 2009 (NESETA) and must comply with the NESETA.

The provisions of the NESETA prevail over the provisions of this District Plan to the extent of any inconsistency. No other rules in the District Plan that duplicate or conflict with the Standard shall apply.

- b. Resource Management (National Environmental Standards for Telecommunications Facilities “NESTF”) Regulations 2016:

The NESTF 2016 controls a variety of telecommunications facilities and related activities as permitted activities subject to standards, including:

- i. cabinets in and outside of road reserve;
- ii. antennas on existing and new poles in the road reserve;
- iii. replacement, upgrading and co-location of existing poles and antennas outside the road reserve;
- iv. new poles and antennas in rural areas;
- v. antennas on buildings;
- vi. small-cell units on existing structures;
- vii. telecommunications lines (underground, on the ground and overhead) and facilities in natural hazard areas; and
- viii. associated earthworks.

All telecommunications facilities are controlled by the NESTF 2016 in respect of the generation of radiofrequency fields.

The NESTF 2016 and relevant guidance for users can be found at: <http://www.mfe.govt.nz/rma/legislative-tools/national-environmental-standards/national-environmental-standards> .

The provisions of the NESTF 2016 prevail over the provisions of this District Plan, to the extent of any inconsistency. No other rules in the District Plan that duplicate or conflict with the NESTF 2016 shall apply. However, District Plan provisions continue to apply to some activities covered by the NESTF 2016, including those which, under regulations 44 to 52, enable rules to be more stringent than the NESTF, such as being subject to heritage rules, Significant Natural Areas, Outstanding Natural Features and Landscapes, and amenity landscape rules.

- c. New Zealand Electrical Code of Practice for Electrical Safe Distances.

Compliance with the 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 (such as buildings, earthworks and

conductive fences), including any activities that are otherwise permitted by the District Plan must comply with this legislation.

Advice Note: To assist plan users in complying with NZECP 34:2001, the major distribution components of the Aurora network (the Electricity sub-transmission infrastructure and significant electricity distribution infrastructure) are shown on the District Plan web mapping application.

For the balance of Aurora's network plan users are advised to consult with Aurora's network maps at [www.auroraenergy.co.nz](http://www.auroraenergy.co.nz) or contact Aurora directly for advice.

Compliance with this District Plan does not ensure compliance with NZECP 34:2001.

- d. Advice Note: Electricity (Hazards from Trees) Regulations 2003.

Vegetation to be planted around electricity networks should be selected and/or managed to ensure that it will not result in that vegetation breaching the Electricity (Hazards from Trees) Regulations 2003.

### 30.3.3 Interpreting and Applying the Rules

30.3.3.1 A permitted activity must comply with all the rules listed in the Activity and Standards tables, and any relevant district wide rules unless any of the exceptions set out in Rule 30.3.3.3 apply.

30.3.3.2 Where an activity does not comply with a Standard listed in the Standards table, the activity status identified by the Non-Compliance Status column applies. Where an activity breaches more than one Standard, the most restrictive status applies to the Activity.

30.3.3.3 The rules contained in this Chapter prevail over any other rules that may apply to energy and utilities in the District Plan, unless specifically stated to the contrary and with the exception of:

- a. 25 Earthworks.
- b. 26 Historic Heritage.
- c. 32 Protected Trees.
- d. 33 Indigenous Vegetation and Biodiversity.
- e. 35 Temporary Activities and Relocated Buildings.
- f. 36 Noise.
- g. 39 Wāhi Tūpuna.

Note: Utilities can also be provided as designations if the utility operator is a requiring authority. Refer to Chapter 37 – Designations of the Plan for conditions and descriptions of designated sites.

30.3.3.4 Roads are defined as a utility, however the rules in this Chapter do not apply to the construction, management, upgrading or use of Roads of the Transport Network. These activities are managed by Chapter 27 Subdivision and Development and Chapter 29 Transport.

30.3.3.5 Airports and approach control services are defined as utilities. Some Airport Related Activities are also defined as utilities. However the rules in this Chapter do not apply to Airport Activities or Airport Related Activities within the Airport Zone (Chapter 17). Airport Activities and Airport Related Activities within the Airport Zone are managed in Chapter 17.

30.3.3.6 The following abbreviations are used in the tables.

P	Permitted	C	Controlled
RD	Restricted Discretionary	D	Discretionary
NC	Non Complying	PR	Prohibited

**30.4 Energy Rules**

<b>30.4.1</b>	<b>Renewable Energy Activities</b>	<b>Activity Status</b>
30.4.1.1	Small and Community-Scale Distributed Electricity Generation and Solar Water Heating (including any structures and associated buildings but excluding Wind Electricity Generation), other than those activities restricted by Rule 30.4.1.4.	P
30.4.1.2	Small and Community-Scale Distributed Wind Electricity Generation within the Rural Zone, Gibbston Character Zone and Rural Lifestyle Zone that complies with Rule 30.4.2.3  Control is reserved to the following:  a. noise;  b. visual effects;  c. colour;  d. vibration.	C
30.4.1.3	Renewable Electricity Generation Activities, limited to masts, drilling and water monitoring for the purpose of research and exploratory-scale investigations that are temporary.  Discretion is restricted to:  a. the duration of works and the research purpose;  b. the location of investigation activities and facilities, including proximity to, and effects on, sensitive uses and environments;  c. the height and scale of facilities and potential visual effects;  d. environmental effects.	RD

30.4.1	Renewable Energy Activities	Activity Status
30.4.1.4	<p>Small and Community-Scale Distributed Electricity Generation and Solar Water Heating including any structures and associated buildings, which is either:</p> <p>a. Wind Electricity Generation other than that provided for in Rule 30.4.1.2 or where it is sited within the wāhi tūpuna overlay.</p> <p>OR</p> <p>b. Located in any of the following sensitive environments:</p> <p>i. Arrowtown Residential Historic Management Zone;</p> <p>ii. Town Centre Special Character Areas;</p> <p>iii. Significant Natural Areas;</p> <p>iv. Outstanding Natural Landscapes;</p> <p>v. Outstanding Natural Features;</p> <p>vi. Heritage Features and Heritage Overlay Areas.</p>	D
30.4.1.5	Renewable Electricity Generation Activities, other than Small and Community-Scale Distributed Electricity Generation, and including any new or additional building housing plant and electrical equipment.	D

30.4.2	Renewable Energy Standards	Activity Status
30.4.2.1	<p>Small and Community-Scale Distributed Electricity Generation and Solar Water Heating must:</p> <p>30.4.2.1.1 Not overhang the edge of any building.</p> <p>30.4.2.1.2 Be finished in recessive colours: black, dark blue, grey or brown if Solar Electricity Generation cells, modules or panels.</p> <p>30.4.2.1.3 Be finished in similar recessive colours to those in the above standard if frames, mounting or fixing hardware. Recessive colours must be selected to be the closest colour to the building to which they form part of, are attached to, or service.</p> <p>30.4.2.1.4 Be set back in accordance with the internal and road boundary setbacks for buildings in the zone in which they are located. Any exemptions identified in the zone rules for accessory buildings do not apply.</p> <p>30.4.2.1.5 Not intrude through any recession planes applicable in the zone in which they are located.</p>	D

30.4.2	Renewable Energy Standards	Activity Status
	<p>30.4.2.1.6 Not protrude more than a maximum of 0.5 m above the maximum height limit specified for the zone if solar panels on a sloping roof.</p> <p>30.4.2.1.7 Not protrude a maximum of 1.0 m above the maximum height limit specified for the zone, for a maximum area of 5m<sup>2</sup> if solar panels on a flat roof.</p> <p>30.4.2.1.8 Not exceed 150m<sup>2</sup> in area if free standing Solar Electricity Generation and Solar Water Heating.</p> <p>30.4.2.1.9 Not exceed 2.0 metres in height if free standing Solar Electricity Generation and Solar Water Heating.</p> <p>30.4.2.1.10 Be located within an approved building platform where located in the Rural, Gibbston Character or Rural Lifestyle Zone.</p> <p>30.4.2.1.11 Be attached to an existing building or structure when located within an identified wāhi tūpuna and outside of the urban environment.</p>	
30.4.2.2	<p>Mini and Micro Hydro Electricity Generation must:</p> <p>30.4.2.2.1 Comply with Road and Internal Boundary Building Setbacks in the zone in which they are located.</p> <p>30.4.2.2.2 Not exceed 2.5 metres in height.</p> <p>30.4.2.2.3 Be finished in recessive colours consistent with the building it is servicing on site.</p> <p>Note: Reference should also be made to the Otago Regional Council Regional Plan: Water.</p>	D
30.4.2.3	<p>Wind Electricity Generation must:</p> <p>30.4.2.3.1 Comprise no more than two Wind Electricity Generation turbines or masts on any site.</p> <p>30.4.2.3.2 Involve no lattice towers.</p> <p>30.4.2.3.3 Be set back in accordance with the internal and road boundary setbacks for buildings in the zone in which they are located. Any exemptions identified in the zone rules for accessory buildings do not apply.</p> <p>30.4.2.3.4 Not exceed the maximum height or intrude through any recession planes applicable in the zone in which they are located.</p> <p>30.4.2.3.5 Be finished in recessive colours with a light reflectance value of less than 16%.</p>	D

30.4.2	Renewable Energy Standards	Activity Status
	<p>Notes:</p> <p>In the Rural and Gibbston Character Zones the maximum height shall be that specified for non-residential building ancillary to viticulture or farming activities (10m).</p> <p>The maximum height for a wind turbine shall be measured to the tip of blade when in vertical position.</p> <p>Wind turbines must comply with Chapter 36 (Noise).</p>	
30.4.2.4	<p>Biomass Electricity Generation</p> <p>30.4.2.4.1 Biomass Electricity Generation fuel material shall be sourced on the same site as the generation plant, except where the generation plant is located in Industrial Zones (and Industrial Activities Areas within Structure Plans).</p> <p>30.4.2.4.2 Any outdoor storage of Biomass Electricity Generation fuel material shall be screened from adjoining sites and public places.</p> <p>30.4.2.4.3 Biomass Electricity Generation plant and equipment shall be located inside a Building.</p> <p>Note: Reference should also be made to the Otago Regional Council Regional Plan: Air</p>	D
30.4.2.5	<p>Buildings for renewable energy activities</p> <p>Any building housing plant and electrical equipment associated with Renewable Electricity Generation activities, unless permitted in the zone in which it located or approved by resource consent, shall:</p> <p>30.4.2.5.1 Not exceed 10m<sup>2</sup> in area and 2.5m in height.</p> <p>30.4.2.5.2 Be set back in accordance with the internal and road boundary setbacks for accessory buildings in the zone in which it is located.</p> <p>30.4.2.5.3 Be finished in recessive colours, consistent with the building it is servicing on site.</p>	D

30.4.3	Non-Renewable Energy Activities	Activity Status
30.4.3.1	<p>Non-renewable Electricity Generation where either:</p> <p>a. the generation only supplies activities on the site on which it is located and involves either:</p>	P

	<ul style="list-style-type: none"> <li>i. standby generators associated with community, health care, and utility activities; or</li> <li>ii. generators that are part of a Stand-Alone Power System on sites that do not have connection to the local distributed electricity network.</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>b. generators that supply the local distributed electricity network for a period not exceeding 3 months in any calendar year.</li> </ul> <p>Note: Diesel Generators must comply with the provisions of Chapter 36 (Noise).</p>	
30.4.3.2	Non-Renewable Energy Activities which are not otherwise specified.	NC

**30.5 Utility Rules**

30.5.1	General Utility Activities	Activity Status
30.5.1.1	<p>Buildings associated with a Utility</p> <p>Any building or cabinet or structure of 10m<sup>2</sup> or less in total footprint or 3m or less in height which is not located in the areas listed in Rule 30.5.1.15.</p> <p>This rule does not apply to:</p> <ul style="list-style-type: none"> <li>a. masts for navigation or meteorology</li> <li>b. poles, antennas, and associated cabinets (cabinets up to 10m<sup>2</sup> in area and 3m in height, exclusive of any plinth or other foundation), for telecommunication and radio communication</li> <li>c. lines and support structures.</li> </ul>	P
30.5.1.2	Flood Protection Works for the maintenance, reinstatement, repair or replacement of existing flood protection works for the purpose of maintaining the flood carrying capacity of water courses and/or maintaining the integrity of existing river protection works.	P
30.5.1.3	Underground pipes and incidental structures and equipment for transmitting and distributing gas.	P
30.5.1.4	Underground pipes and incidental structures and equipment for the supply and drainage of water or wastewater.	P
30.5.1.5	Water and irrigation races, drains, channels and underground pipes for water and irrigation, other than those activities restricted by Rule 30.5.1.4.	P



30.5.1	General Utility Activities	Activity Status
30.5.1.6	Structures, facilities, plant, equipment and associated works for monitoring and observation of natural hazards.	P
30.5.1.7	Maintenance, repair or replacement of existing structures, facilities, plant, equipment and associated works for natural hazard mitigation.	P
30.5.1.8	Underground pipes and incidental structures and equipment for the conveyance of stormwater.	P
30.5.1.9	Water, wastewater and stormwater pump stations.	P
30.5.1.10	<p>Stormwater detention/retention ponds or stormwater wetlands, other than those activities restricted by Rule 30.5.1.13.</p> <p>Control is reserved to:</p> <ul style="list-style-type: none"> <li>a. effects on the use of open space;</li> <li>b. provision of safe access for maintenance;</li> <li>c. effects on health and safety;</li> <li>d. landscaping.</li> </ul>	C
30.5.1.11	<p>Buildings (associated with a Utility)</p> <p>The addition, alteration or construction of buildings greater than 10m<sup>2</sup> in total footprint or 3m in height other than buildings located in the areas listed in Rule 30.5.1.15.</p> <p>This rule does not apply to:</p> <ul style="list-style-type: none"> <li>a. masts or poles for navigation or meteorology;</li> <li>b. poles, antennas, and associated cabinets (cabinets up to 10m<sup>2</sup> in area and 3m in height, exclusive of any plinth or other foundation) for telecommunication and radio communication;</li> <li>c. line and support structures.</li> </ul> <p>Control is reserved to:</p> <ul style="list-style-type: none"> <li>a. location;</li> <li>b. external appearance and visual effects;</li> <li>c. associated earthworks;</li> <li>d. parking and access;</li> <li>e. landscaping.</li> </ul>	C

30.5.1	General Utility Activities	Activity Status
30.5.1.12	<p>Aboveground pipelines and attached ancillary structures for the conveyance of water, wastewater, stormwater and gas.</p> <p>Discretion is restricted to:</p> <ul style="list-style-type: none"> <li>a. functional needs of the utilities;</li> <li>b. visual effects;</li> <li>c. location, limited to the operation and function of the site, existing activities and effects on amenity values;</li> <li>d. odour effects.</li> </ul>	RD
30.5.1.13	<p>Water and irrigation races, stormwater detention/retention ponds or stormwater wetlands within the area around Queenstown and Wānaka Airports identified in Figures 4 and Figures 5 in Section 30.7 below.</p> <p>Discretion is restricted to:</p> <ul style="list-style-type: none"> <li>a. The risk to airport operations of increased bird strike at Queenstown or Wānaka Airports and measures to mitigate that risk.</li> </ul>	RD
30.5.1.14	Structures, facilities, plant, equipment and associated works including earthworks for the protection of the community from natural hazards not otherwise provided for in Rule 30.5.1.7.	D
30.5.1.15	<p>Buildings (associated with a Utility)</p> <p>Any addition, alteration or construction of buildings in:</p> <ul style="list-style-type: none"> <li>a. any Significant Natural Areas;</li> <li>b. the Arrowtown Residential Historic Management Zone.</li> </ul> <p>This rule does not apply to:</p> <ul style="list-style-type: none"> <li>a. masts or poles for navigation or meteorology;</li> <li>b. poles, antennas, and associated cabinets (cabinets up to 10m<sup>2</sup> in area and 3m in height, exclusive of any plinth or other foundation), for telecommunication and radio communication;</li> <li>c. lines and support structures, and associated electricity cabinets up to 10m<sup>2</sup> in area and 3m in height, exclusive of any plinth or other foundation).</li> </ul>	D
30.5.1.16	Flood Protection Works not otherwise provided for in Rule 30.5.1.2	D
30.5.1.17	Waste Management Facilities	D
30.5.1.18	Water and Wastewater Treatment Facilities	D

30.5.1	General Utility Activities	Activity Status
30.5.1.19	Utilities and Buildings (associated with a Utility) which are not:  30.5.1.19.1 provided for in any National Environmental Standard;  OR  30.5.19.2 otherwise listed in Rules 30.5.1.1 to 30.5.1.18, 30.5.3.1 to 30.5.3.5, 30.5.5.1 to 30.5.5.8, or 30.5.6.1 to 30.5.6.13.	D

30.5.2	General Utilities - Standards	Non-compliance Status
30.5.2.1	Setback from internal boundaries and road boundaries  Where the utility is a building, it must be set back in accordance with the internal and road boundary setbacks for accessory buildings in the zone in which it is located.  This rule does not apply to:  a. poles, antennas, and associated cabinets (cabinets up to 10m <sup>2</sup> in area and 3m in height, exclusive of any plinth or other foundation), for telecommunication and radio communication;  b. lines and support structures for telecommunications.	D
30.5.2.2	Buildings associated with a Utility in Outstanding Natural Landscapes (ONL) and Outstanding Natural Features (ONF)  Any building within an ONL or ONF must be less than 10m <sup>2</sup> in area and less than 3m in height.  This rule does not apply to:  a. masts or poles for navigation or meteorology;  b. poles, antennas, and associated cabinets (cabinets up to 10m <sup>2</sup> in area and 3m in height, exclusive of any plinth or other foundation), for telecommunication and radio communication;  c. lines and support structures.	D
30.5.2.3	Height  All buildings or structures must comply with the relevant maximum height provisions for buildings of the zone they are located in.  This rule does not apply to:  a. masts or poles for navigation or meteorology;	D

30.5.2	General Utilities - Standards	Non-compliance Status
	<p>b. poles, antennas, and associated cabinets (cabinets up to 10m<sup>2</sup> in area and 3m in height, exclusive of any plinth or other foundation), for telecommunication and radio communication;</p> <p>c. lines and support structures.</p>	

30.5.3	National Grid Activities	Activity Status
30.5.3.1	Minor Upgrading	P
30.5.3.2	<p>Buildings, structures and activities that are not National Grid Sensitive Activities within the National Grid Yard</p> <p>Subject to compliance with Rules 30.5.4.1 and 30.5.4.2.</p>	P
30.5.3.3	<p>Earthworks within the National Grid Yard</p> <p>Subject to compliance with Rule 30.5.4.2</p>	P
30.5.3A	<p>Underground electricity cables</p> <p>The placement of underground electricity transmission cables provided the ground surface is reinstated to the state it was prior to works commencing.</p>	P
30.5.3.4	<p>Buildings, structures and National Grid sensitive activities in the vicinity of the Frankton Substation</p> <p>Any building, structure or National Grid sensitive activity or storage or use of explosive or flammable Hazardous Substances* within 45m of the designated boundary of Transpower New Zealand Limited's Frankton Substation.</p> <p>Control is reserved to:</p> <ol style="list-style-type: none"> <li>a. the extent to which the design and layout (including underground cables, services and fencing) avoids adverse effects on the ongoing operation, maintenance upgrading and development of the substation;</li> <li>b. the risk of electrical hazards affecting public or individual safety, and the risk of property damage; and</li> <li>c. measures proposed to avoid or mitigate potential adverse effects, including reverse sensitivity effects.</li> </ol> <p>* Excludes storage or use of Hazardous Substances ancillary to Residential Activity.</p>	C

30.5.3	National Grid Activities	Activity Status
30.5.3.5	Erecting any lines, lattice towers or support structures for new overhead lines to convey electricity in all zones.	D
30.5.3.6	National Grid Sensitive Activities in the National Grid Yard	NC

30.5.4	National Grid Standards	Non-compliance Status
30.5.4.1	<p>Buildings and Structures permitted within the National Grid Yard</p> <p>30.5.4.1.1 Buildings and structures that meets the safe electrical clearance distances required by New Zealand Electrical Code of Practice for Safe Electrical Distances (NZECP 34:2001).</p> <p>30.5.4.1.2 A non-conductive fence located 5m or more from any National Grid Support Structure and no more than 2.5m in height.</p> <p>30.5.4.1.3 A network utility, excluding a building or structure for the reticulation and storage of water for irrigation purposes.</p> <p>30.5.4.1.4 Any new non-habitable building less than 2.5m high and 10m<sup>2</sup> in floor area and is more than 12m from a National Grid transmission line support structure.</p> <p>30.5.4.1.5 Any non-habitable building or structure used for agricultural or horticultural activities provided that they are:</p> <ol style="list-style-type: none"> <li>a. less than 2.5m high;</li> <li>b. located at least 12m from a National Grid transmission line support structure;</li> <li>c. not a wintering barn, produce packing facility, milking shed/dairy shed (excluding the stockyards and ancillary platforms), or a commercial glasshouse, or a structure associated with irrigation, or a factory farm.</li> </ol> <p>30.5.4.1.6 Alterations to existing buildings that do not alter the building envelope.</p> <p>30.5.4.1.7 An agricultural or horticultural structure where Transpower has given written approval in accordance with clause 2.4.1 of NZECP34:2001.</p> <p>Note: Refer to the Definitions for illustration of the National Grid Yard.</p>	NC
30.5.4.2	Earthworks permitted within the National Grid Yard	NC

30.5.4	National Grid Standards	Non-compliance Status
	<p>30.5.4.2.1 Earthworks within 6 metres of the outer visible edge of a National Grid transmission line support structure must be no deeper than 300mm.</p> <p>30.5.4.2.2 Earthworks between 6 metres to 12 metres from the outer visible edge of a National Grid transmission line support structure must be no deeper than 3 metres.</p> <p>30.5.4.2.3 Earthworks must not create an unstable batter that will affect a National Grid transmission line support structure.</p> <p>30.5.4.2.4 Earthworks must not result in a reduction in the existing conductor clearance distance below what is required by the NZECP 34:2001.</p> <p>The following earthworks are exempt from the rules above:</p> <p>30.5.4.2.5 Earthworks undertaken by network utility operators in the course of constructing or maintaining utilities providing the work is not associated with buildings or structures for the storage of water for irrigation purposes.</p> <p>30.5.4.2.6 Earthworks undertaken as part of agricultural or horticultural activities or domestic gardening.</p> <p>30.5.4.2.7 Repair sealing, resealing of an existing road, footpath, farm track or driveway.</p> <p>Note: Refer to the Definitions for illustration of the National Grid Yard.</p>	
30.5.4.3	<p>Electric and magnetic fields</p> <p>30.5.4.3.1 Electric and magnetic fields 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 Environmental Health Criteria (No 238, June 2007).</p>	NC

30.5.5	Electricity Distribution Activities	Activity Status
30.5.5.1	Minor Upgrading	P
30.5.5.2	<p>Lines and Supporting Structures</p> <p>The placement and upgrading of lines, poles and supporting structures within formed legal road.</p>	P
30.5.5.3	Underground Electricity Cables	P

30.5.5	Electricity Distribution Activities	Activity Status
	The placement of underground electricity distribution cables provided the ground surface is reinstated to the state it was prior to works commencing.	
30.5.5.4	<p>Lines and Supporting Structures</p> <p>Except as otherwise stated in Rules 30.5.5.2 above, and 30.5.5.5 below new lines and associated above ground support structures including masts, poles or ancillary equipment, but excluding lattice towers, to convey electricity (at a voltage of equal to or less than 110kV at a capacity equal to or less than 100MV).</p> <p>Control is reserved to:</p> <ul style="list-style-type: none"> <li>a. location;</li> <li>b. route;</li> <li>c. height;</li> <li>d. appearance, scale and visual effects.</li> </ul>	C
30.5.5.5	<p>Lines and Supporting Structures</p> <p>Any line or support structure where it involves erecting any support structures for overhead lines to convey electricity (at a voltage of equal to or less than 110kV at a capacity of equal to or less than 100MVA) in any Outstanding Natural Feature or Outstanding Natural Landscape or Significant Natural Areas.</p>	D

30.5.6	Telecommunications, radio communication, navigation or meteorological communication activities	Activity Status
30.5.6.1	Minor Upgrading	P
30.5.6.2	<p>New Aerial Lines and Supporting Structures within formed road reserve; or</p> <p>New aerial telecommunication line/s on existing telecommunication or power structures including when located in sensitive environments identified in Rule 30.5.6.5.</p>	P
30.5.6.3	The construction, alteration, or addition to underground lines providing the ground surface is reinstated to the state it was prior to works commencing.	P
30.5.6.4	<p>New Aerial Lines and Supporting Structures (outside formed road reserve)</p> <p>Not located in any of the sensitive environments identified by Rule 30.5.6.5</p>	C

30.5.6	Telecommunications, radio communication, navigation or meteorological communication activities	Activity Status
	Control is reserved to: <ul style="list-style-type: none"> <li>a. location;</li> <li>b. route;</li> <li>c. appearance, scale and visual effects.</li> </ul>	
30.5.6.5	New Aerial Lines and Supporting Structures  Any line or support structure within any Outstanding Natural Feature or Outstanding Natural Landscape or Significant Natural Areas.	D
30.5.6.6	Poles  With a maximum height no greater than: <ul style="list-style-type: none"> <li>a. 18m in the High Density Residential (Queenstown – Flat Sites), Queenstown Town Centre, Wānaka Town Centre (Wānaka Height Precinct) or Airport Zones;</li> <li>b. 25m in the Rural Zone;</li> <li>c. 15m in the Business Mixed Use Zone (Queenstown);</li> <li>d. 13m in the Local Shopping Centre, Business Mixed Use (Wānaka and Three Parks), or Jacks Point zones;</li> <li>e. 18m in the General Industrial and Service Zone provided that               <ul style="list-style-type: none"> <li>i. On sites adjoining or separated by a road from a Residential zone (including the Meadow Park Special Zone and the Large Lot Residential Zone) the pole does not breach the recession plane standard set out within Rule 18A.5.8(b);</li> </ul> </li> <li>f. 18m in the Three Parks Commercial Zone provided that;               <ul style="list-style-type: none"> <li>i. Standard 19A.5.1 is complied with;</li> </ul> </li> <li>g. 18m in the Three Parks Business Zone provided that:               <ul style="list-style-type: none"> <li>i. Standard 19B.5.1.4 is complied with;</li> </ul> </li> <li>h. 11m in any other zone;</li> <li>i. 8m in any identified Outstanding Natural Landscape; and</li> <li>j. in the Commercial Precinct of the Settlement Zone at Cardrona, 15m for single user facilities and 18m for multiple user facilities, provided that in either case;               <ul style="list-style-type: none"> <li>i. The pole does not breach the height recession planes in Rule 20.5.14, applied at the boundary of the Commercial Precinct;</li> <li>ii. The pole is set 3m back from any road boundary; and</li> <li>ii. The headframe and antenna dimension does not exceed 1.2m.</li> </ul> </li> </ul>	P



30.5.6	Telecommunications, radio communication, navigation or meteorological communication activities	Activity Status
	Where located in the Rural Zone within the Outstanding Natural Landscape or Rural Character Landscape, poles must be finished in colours with a light reflectance value of less than 16%.	
30.5.6.7	<p>Poles</p> <p>Exceeding the maximum height for the zones identified in Rule 30.5.6.6 OR any pole located in</p> <ul style="list-style-type: none"> <li>a. any identified Outstanding Natural Feature;</li> <li>b. the Arrowtown Residential Historic Management Zone;</li> <li>c. Arrowtown Town Centre;</li> <li>d. Queenstown Special Character Area;</li> <li>e. Significant Natural Area;</li> <li>f. Sites containing a Heritage Feature; and</li> <li>g. Heritage Overlay Areas.</li> </ul>	D
30.5.6.8	<p>Antennas and ancillary equipment</p> <p>Provided that for panel antennas the maximum width is 0.7m, and for all other antenna types the maximum surface area is no greater than 1.5m<sup>2</sup> and for whip antennas, less than 4m in length.</p> <p>Where located in the Rural Zone, Settlement Zone at Cardrona, within the Outstanding Natural Landscape or Rural Landscape Classification, antennae must be finished in colours with a light reflectance value of less than 16%.</p>	P
30.5.6.9	<p>Antennas and ancillary equipment</p> <p>Subject to Rule 30.5.6.10 provided that for panel antennas the maximum width is between 0.7m and 1.0m, and for all other antenna types the surface area is between 1.5m<sup>2</sup> and 4m<sup>2</sup> and for whip antennas, more than 4m in length.</p> <p>Control is reserved to all of the following:</p> <ul style="list-style-type: none"> <li>a. location;</li> <li>b. appearance, colour and visual effects</li> </ul>	C
30.5.6.10	<p>Any antennas located in the following:</p> <ul style="list-style-type: none"> <li>a. any identified Outstanding Natural Feature;</li> <li>b. the Arrowtown Residential Historic Management Zone;</li> <li>c. Arrowtown Town Centre;</li> <li>d. Queenstown Special Character Area;</li> </ul>	D

30.5.6	Telecommunications, radio communication, navigation or meteorological communication activities	Activity Status
	e. Significant Natural Areas; and f. Heritage, Features and Heritage Overlay Areas.	
30.5.6.11	Small Cell Units  Provided that the small cell unit is not located within a Heritage Precinct.	P
30.5.6.12	Microcells  A microcell and associated antennas, with a volume of between 0.11m <sup>3</sup> and 2.5m <sup>3</sup> provided that the microcell is not located within a Heritage Precinct.  Control is reserved to: <ul style="list-style-type: none"> <li>a. appearance;</li> <li>b. colour; and</li> <li>c. visual effects.</li> </ul>	C
30.5.6.13	Small Cell Units and Microcells  30.5.6.13.1 A microcell and associated antennas, with a volume more than 2.5m <sup>3</sup> .  OR  30.5.6.13.2 A small cell unit located within a Heritage Precinct.	D

## 30.6 Rules - Non-Notification of Applications

### 30.6.1 Any application for resource consent for the following matters does not require the written approval of other persons and will not be notified or limited-notified:

30.6.1.1 Controlled activities except for applications when within 45m of the designated boundary of Transpower New Zealand Limited's Frankton Substation.

30.6.1.2 Discretionary activities for Flood Protection Works.

### 30.6.2 Rules - Notification

30.6.2.1 For any application for resource consent made under Rules 30.5.3.4, and 30.5.4, when deciding who is an affected person for the purposes of section 95E of the Resource Management Act 1991 the Council will give specific consideration to Transpower New Zealand Limited.

## 30.7 Queenstown Airport and Wānaka Airport Figures

Approach and Protection Measures for the purpose of Rule 30.5.1.13 only.



