

BEFORE THE QUEENSTOWN-LAKES DISTRICT COUNCIL

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of the Proposed Queenstown-Lakes
District Plan

Statement of evidence of **MATTHEW McCALLUM-CLARK** for Vodafone New Zealand Limited (0179), Spark New Zealand Trading Limited (0191) and Chorus New Zealand Limited (781) in relation to Chapter 30 – Energy and Network Utilities

02 September 2016

INCITE
Resource and Environmental Management
PO Box Box 25-289
Christchurch
Phone 03 379 9749
Mobile 027 221 3363



Statement of Professional Qualifications and Experience

1. My full name is Matthew Eaton Arthur McCallum-Clark. I am a Resource Management Consultant and a director of the firm Incite, which has offices in Auckland, Wellington, Nelson and Christchurch.
2. I hold a Bachelor of Laws from Canterbury University, a Bachelor of Commerce (Economics) from Otago University and have undertaken a postgraduate diploma in Environmental Auditing through Brunel University in the UK. I am also a qualified and experienced independent hearing commissioner with chair endorsement under the Ministry for the Environment's Making Good Decisions Programme.
3. Apart from a short period at a city council, I have been a resource management consultant for about 22 years. Over the last ten years I have specialised in providing policy advice to a range of clients, particularly local authorities. This has included significant involvement in regional plan development for the Canterbury and Southland Regional Councils, as well as a lead planner role with respect to the Hurunui District Plan. I have also reviewed and prepared submissions on a number of proposed district plans, including for Queenstown-Lakes District, Southland District, and the Christchurch District Replacement Plan.
4. In this matter, I assisted Chorus New Zealand Limited, Spark New Zealand Trading Limited and Vodafone New Zealand Limited ("the Telecommunications Companies") in reviewing the Proposed Queenstown Lakes District Plan (the 'Proposed Plan') when it was notified, and I assisted with the preparation of the submissions and further submissions by the Telecommunications Companies. I also attended a pre-hearing discussion with representatives of the Telecommunications Companies and Council staff in Queenstown in May 2016.

Code of Conduct

5. I confirm that I have read the Hearing Commissioners minute and direction on Procedures for the Hearing of Submissions and I confirm that I have read the code of conduct for expert witnesses as contained in the Environment Court's Practice Note of 2014. I have complied with the Practice Note when preparing my written statement of evidence, and will do so when I give oral evidence.

6. The data, information, facts and assumptions I have considered in forming my opinions are set out in my evidence to follow. The reasons for the opinions expressed are also set out in the evidence to follow.
7. Unless I state otherwise, this evidence is within my sphere of expertise and I have not omitted to consider material facts known to me that might alter or detract from the opinions that I express.

Scope

8. The scope of this evidence relates to the Energy and Utilities Chapter of the Proposed Plan.
9. This evidence is broken into a number of parts:
 - a) the objectives and policies;
 - b) rules in relation to lines;
 - c) mast height limits;
 - d) specific provision for “small cells”;
 - e) rules relating to antennas; and
 - f) a range of drafting issues, which may ultimately lead to some unintended consequences.
10. I am somewhat disappointed at the level of communication and collaboration that has been available with the Council during the District Plan process. In my experience, the ability to have free and frank discussion over matters occurring in the submissions, with a view to arriving at agreed outcomes, is an efficient and worthwhile process. This is particularly relevant for those matters where technical issues mean the framework is not particularly functional, or there are drafting issues creating unintended consequences.
11. At the outset I also note that in the Council Officer’s Section 42A Report, many submission points are discussed as being from “Chorus”. Chorus New Zealand Limited, Spark New Zealand Trading Limited, Vodafone New Zealand Limited and 2 Degrees Limited lodged identical submissions, as a part of a move by the telecommunications industry to speak with a ‘single voice’. On that basis,

whenever one of these telecommunication companies is identified in the singular, in reality, the four telecommunication companies have the same submission point.

12. A “marked up” version of the provisions recommended in the s42A Report for this Chapter, where further changes are still sought, is attached to this evidence, to assist with the discussion and understanding of the outcomes sought.

Objectives and Policies

13. The Telecommunication Companies lodged substantial submissions on the objectives and policies of the Energy and Utilities Chapter. The submission points generally leveraged off submission points on the Strategic Directions Chapter and sought to give effect to the Regional Policy Statement.
14. The general approach taken by the Telecommunications Companies on the Proposed Plan and in other District Plan reviews around New Zealand is to ensure policy frameworks in plans provide for an appropriate consideration of the competing interests of network utility infrastructure and avoiding, remedying or mitigating the adverse effects of this infrastructure. In my opinion, the Proposed Plan, as notified, had a significant deficit in enabling provisions, with a stronger policy focus on avoidance of adverse effects, particularly in more sensitive natural environments. The submissions from the Telecommunications Companies sought to redress this balance, so the benefits of network utilities and the contributions they make to social and economic wellbeing can be appropriately weighted in resource consent decision making and in establishing the Proposed Plan rule regime.
15. A district plan must give effect to a Regional Policy Statement (RPS)¹. The operative RPS includes relatively limited provisions in regard to infrastructure within Chapter 9 Land. Objective 9.4.2 and Policy 9.5.2 promote the sustainable management of Otago’s infrastructure to meet the reasonably foreseeable needs of Otago’s communities.
16. A territorial authority, in preparing a district plan, must have regard to a proposed RPS². The Proposed RPS was notified in May 2015, and decisions are due for

¹ s75(3)(c) RMA

² s74(2)(a)(i) RMA

release in November 2016. The Proposed RPS has a more comprehensive framework in regard to infrastructure than the operative RPS. Relevant provisions are contained in Chapter 3 *Communities in Otago are resilient, safe and healthy*. In particular, Objectives 3.4 and 3.5 and related policies:

- recognise the national and regional significance of specified infrastructure including telecommunication and radiocommunication;
- recognise the functional needs of infrastructure of regional and national importance in integration infrastructure and land use;
- require urban growth to be managed such that it occurs in areas with sufficient infrastructure capacity or areas where these serves can be extended or upgraded;
- recognise the role infrastructure plays in supporting economic, social and community activities
- Require the adverse effects of infrastructure to be minimised, with a hierarchy of outcomes promoted depending on the sensitivity of the receiving environment (e.g. giving preference to avoiding the most sensitive areas such as outstanding natural features and landscapes, but where avoidance is not possible avoiding significant adverse effects on those values and attributes that contribute to the outstanding nature of those areas).

17. In my opinion, the approach taken by the Telecommunications Companies in their submissions is consistent with the sustainable management approach for infrastructure promoted in the operative RPS, and the policy framework in the Proposed RPS as summarised above.

18. A number of the submission points are recommended to be accepted by the Council's Section 42A Officer. As is addressed in the evidence of Mr McCarrison and Mr Clune, the balance between providing for telecommunication systems and protection of the Queenstown Lakes District's natural environment is a delicate one. In my opinion, the objective and policy mix of the notified version of the proposed plan was substantially lacking in terms of enabling modern communication systems. While further adjustment could be made, it is my opinion that the objective and policy mix now recommended by the Council's Section 42A Officer shows a more appropriate balance between enabling and protection, in light of the Regional Policy Statement, proposed Regional Policy Statement, and the Council's revised positions with respect to the Strategic Directions Chapter.

19. In particular, I note and support the recommended changes to Objectives 30.2.5 and 30.2.6, and Policies 30.2.5.1 and 30.2.5.4.
20. Amendments were sought to Objective 30.2.7 and Policy 30.2.7.1, to recognise that it is not always possible to fully avoid, remedy or mitigate adverse effects within the very large outstanding natural landscape areas in the district.
21. There may be functional and operational reasons why network utilities may need to be located in at least some of these areas, particularly existing built environments, roads and utility corridors and existing communication sites. Siting of equipment within a sensitive environment may be justified in certain circumstances where there are no reasonable alternatives and the community benefits outweigh any costs.
22. The requested amendments also sought that any assessment of adverse effects on an outstanding natural landscape be focussed on the values of the outstanding natural landscape, as some landscapes may include existing built form which may not be a contributing factor to the values of the outstanding natural landscape. The approach of focussing on the values and attributes of a sensitive environment in policy provisions has been adopted in other jurisdictions currently undertaking reviews of planning documents that I have been involved in, including the Hurunui District Plan, the Christchurch District Replacement Plan and the Proposed Bay of Plenty Regional Coastal Environment Plan. In the Bay of Plenty example, Tauranga Harbour is identified as an Outstanding Natural Feature and Landscape (ONFL), but the mapped area includes the port, bridges, transmission lines and urban development in the periphery. These built elements are not the values and attributes that define Tauranga Harbour as an ONFL, and accordingly, further development of infrastructure near these modified areas would be considered more favourably in the policy framework than areas that are less modified.
23. As the Outstanding Natural Landscapes identified in the Proposed Plan cover a range of existing, modified environments, in my opinion, it is important that the objective and policy mix does not assume that some further development of infrastructure is inappropriate.

Rules for Utilities

Lines

24. The provisions relating to telecommunication lines are inherently associated in the Energy and Utilities Chapter with the provisions for electricity lines. This is not inappropriate, as the amenity effects of the two activities are similar. However, it is important that telecommunication lines are not forgotten, in the discussions surrounding electricity lines.
25. New telecommunication lines are seldom installed overhead, on new support structures. On that basis, it is positive that the Officer's recommendations in the Section 42A report specifically address the 'gap' in the notified version of the plan that did not provide for underground lines as a permitted activity. It is also pleasing to note the improvements to the definition of "minor upgrading" and the permitted activity status, both of which, in my opinion, are appropriate and are low risk in terms of resulting in more than minor adverse environmental effects.

Telecommunication Mast Heights

26. The Telecommunication Companies are concerned regarding the limits on mast heights. As has been explained in the evidence of Mr McCarrison, modern telecommunication networks, particularly mobile devices, are often reliant on masts of some form. This is particularly relevant in the Queenstown-Lakes District, where there is an understandable prevalence of mobile device use. This occurs both within and outside of urban areas.
27. The bulk of the district is identified as an Outstanding Natural Landscape. Under the provisions of the Proposed Plan, no mast of any size would be a permitted activity. This is in contrast to the Operative District Plan, which enables short (8 metre) masts as permitted activities in most areas. There are appropriate conditions and other requirements relating to colouring and landscaping. As I understand it, some very discrete and well-designed facilities have been installed, encouraged by this framework.
28. Similarly, there are commonly accepted benefits of adding equipment to existing telecommunication facilities, rather than constructing new facilities, especially in

sensitive environments. However, the proposed rule framework, and that recommended in the Officer's Section 42A Report, provides essentially an equal consenting threshold in these areas for a minor upgrade of an existing site, compared with building a completely new, and likely larger, site.

29. It is my opinion that there is a lack of evidence that small scale infrastructure in Outstanding Natural Landscape areas necessarily requires a resource consent. In my view, small scale infrastructure should be able to be enabled through a permitted activity regime with appropriate performance standards. I have attached, in Appendix 1, a marked-up version of the Council's Section 42A Report recommendations, with suggested changes that would provide for such small scale infrastructure.
30. The height limits that are provided for in the Council's Section 42A report, are a considerable simplification of the regime in the notified Energy and Utilities Chapter, which unhelpfully referenced back to zone-based provisions. This simplification with the associated certainty is supported for obvious reasons. However, it is noted that the areas where masts are permitted are substantially urban areas and those rural parts of the district that are not considered outstanding natural landscapes. On this basis, it is difficult to fathom why the permitted activity height limits are no different to that for any other building in the zone.
31. As has been explained in the technical evidence of Mr Ratuszny, a functioning radio network has certain minimum requirements with respect to radio paths. It is very difficult to establish these in urban areas of the Queenstown Lakes District as permitted activities. It is also my opinion, that the adverse effects of a mast of the same height as a building are likely to be far less than for a comparatively bulky building. On this basis, it is my opinion that when recognising the limited bulk and intrusiveness of a typical mast, some additional height could be enabled without having any greater effect than other larger buildings built to the permitted height limit.
32. On this basis, it is my suggestion that the controlled activity framework be deleted and the discretionary height limits be retained, with some appropriate restrictions on discretion, to enable the more effective and efficient processing of resource consent applications, such that the adverse effects related to the height above that permitted are the only ones that need to be considered.

33. Figure 1 below is of a Vodafone slim line mast in a commercial environment. In many commercial areas of the Queenstown Lakes District, this mast would not meet the criteria to be a permitted activity. Figure 2 is a comparison of a similar 15m high structure in a road, which is typical of what can be achieved as a permitted activity under the NESTF, but would require a resource consent in almost all of the Queenstown-Lakes District.



Figure 1: Vodafone mast at 18 Church Street, Mosgiel (example is 12m high)



Figure 2: Typical Spark light pole on Ponsonby Road, Auckland (example is 15m high)

Small Cells

34. The evidence of Mr McCarrison and Mr Clune outlines the changing nature of telecommunication infrastructure and particularly identifies the move towards “small cells”. The existing rule framework in the Officer’s Section 42A version of the Energy and Utilities Chapter does not clearly provide for this kind of small scale infrastructure. There is a clear risk that such infrastructure will fall to a discretionary activity status, under Rule 30.4.8, which would clearly be inappropriate when considered against the likely environmental effects of this kind of small scale infrastructure, particularly if it were to be subject to performance standards to ensure adverse amenity effects are minimised.

35. Again, provisions are recommended in the attached marked-up version of the Energy and Utilities Chapter. In essence, these provide a permitted activity framework for these facilities, up to a volume measure (0.11m^3). This is consistent with the proposed NESTF. A controlled activity status is suggested up to a larger volume (2.5m^3), with default discretionary above that.

Antennas

36. The proposed rules in relation to antennas (Rule 30.4.19 and 30.4.20) include a rather historically-based set of dimensions, which in my opinion, do not enable technological changes to be easily adopted, or reflect a common level of environmental effect. Over the years in which I have been involved with the telecommunications industry, antenna shapes and sizes have changed dramatically. The once common “whip” style antennas and dish antennas are now far less common with antennas often now being clustered into cylindrical forms, panels more or less in the shape of a narrow refrigerator door, and other permutations, to suit the requirements of the technology and the environment in which they are located.
37. The proposed provisions provide for dish antennas and “whip” antennas, and otherwise provide for a simple length measurement for all other shapes. In my opinion, this is a disadvantage for some kinds of technologies which, for example, may use a relatively long but narrow antenna with no difference in environmental effect to a dish antenna.
38. In my opinion, a simpler requirement would be to set a maximum permitted surface area of an antenna, which is able to be measured from any perspective and treats all antenna types and shapes equally. On this basis, I recommend a simple 1.5 m² in area as the size threshold for antennas, with a length limit retained for whip antennas if this is considered necessary.

Drafting Issues

39. There are a number of more minor issues, which I have accumulated under this heading of Drafting Issues. These are generally matters where the outcome is potentially not in dispute. However, there are likely to be unintended consequences of the provisions as they have been drafted.
40. In the Section 42A Report, the Council Officer has recommended the rejection of the Telecommunication Companies’ submission with respect to the definition of “building”. I accept that the existing definition of “building” has been operating successfully in the District for a number years and that there is no desire within the Council to change it.

41. That being the case, there are a number of provisions and performance standards in the Chapter that may need consequential change. For example, there are a number of references to a “building” in the Energy and Utilities Rules. The Officer’s definition of “building” excludes, through Section 9 of the Building Act 2004, any part of a network utility operator system. This would mean that structures that are operated by the Telecommunication Companies would not fall within the definition of “building”, and accordingly, there could be some confusion as to the activity status and application of performance standards in the rule framework that specifically refer to “buildings”.
42. On this basis, I have recommended a number of changes in the attached tracked changes version of the Energy and Utilities Chapter that will precisely identify structures, their activity status, and the application of relevant performance standards.
43. Controlled activities in the Energy and Utilities Chapter appear to be subject to a wide range of overlapping matters of control. Some of the matters of control relate to the specific threshold that has resulted in controlled activity status, while others do not. Most of the matters of control provide no guidance as to what the Council’s decision-making criteria, when it comes to considering the appropriateness of conditions, might be. For example, the controlled activities for mast height include these matters of control:
- Location
 - Route
 - Height
 - Appearance, scale and visual effects
44. When an issue such as height has triggered the requirement for a controlled activity, it is simply not appropriate to have, as a matter of control with no further guidance “height”. Such a matter of control may imply to the Council or the public that there is the ability to decline a consent or impose a condition requiring a lesser height. What Council may do, is impose a condition that remedies or mitigates the effects of the height applied for. Similar comments apply in relation to the matter of control addressing “location”.

45. On this basis, I have recommended a number of changes to the provisions in the marked-up version of the Energy and Utilities Chapter, that more accurately and appropriately portray the matters over which Council ought to be retaining control, and helpfully provide some guidance to applicants, so that they may appropriately design and tailor applications recognising the issues of concern.
46. The status of the Energy and Utilities Chapter, in relation to other Chapters of the Proposed Plan, remains somewhat uncertain.
47. The beginning sections of the Energy and Utilities Rules include a section numbered 30.3.1, which relates to districtwide provisions and states that:
- “if the districtwide rules are not met, then consent will be required in respect of that matter.”*
48. That rule, along with several others, is repeated in the section titled 30.3.3 – Clarification. However, at 30.3.3.3, it is stated that:
- “the rules contained in this Chapter take precedence 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) historic heritage;*
 - (b) hazardous substances; and*
 - (c) earthworks.”*
49. These statements are clearly in conflict. It is the Telecommunication Companies’ clear preference that the Energy and Utilities Chapter be a stand-alone code with respect to utilities, except where it is specifically stated to the contrary. On that basis, the Telecommunication Companies strongly support Rule 30.3.3.3, and it is suggested that the other Rules that are in conflict ought to be deleted.
50. The drafting of a number of rules within the Energy and Utilities Chapter leads to conflicting activity status conclusions for the same activity. From the appearance

of these rules, it is a case of drafting rather than intent. As an example, Rule 30.4.19 sets out a permitted activity status for antennas, with maximum dimensions. Rule 30.4.21 sets out a discretionary activity status for larger antennas, or antennas located in a number of zones. Neither of these rules are stated to prevail over the other – the activity confusingly has both a discretionary and a permitted status.

51. Similarly, there are unexplained changes in the drafting of ‘cascading’ rules (typically permitted to controlled to discretionary), such that there is a real risk that activities will unintentionally fall to the ‘catch-all’ discretionary activity Rule 30.4.8.
52. In the attached ‘marked-up’ Energy and Utilities Chapter, I have attempted to resolve as many of these issues as possible, in relation to the rules for utilities. I have not attempted to do this for the whole chapter, as this would also involve an investigation as to scope³. In particular, there are a range of performance standards within the rule status table, as well as a separate set of performance standards. This is confusing, and accordingly, I suggest, in the attached marked-up version a simplification by incorporating the relevant performance standards into the rule table.



Matthew McCallum-Clark
2 September 2016

³ I do not consider there are any scope issues for the matters relating to telecommunication utilities, as the submissions from the Telecommunication Companies are wide-ranging across all of the rules.

ENERGY AND UTILITIES 30

Key:

Recommend changes to notified chapter are shown in underlined text for additions and ~~strike through text~~ for deletions. Dated 19 August 2016.

30 Energy and Utilities

30.1 Purpose

Energy and Utilities are of strategic importance and require a coordinated approach in relation to the development of energy resources, the generation 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. In addition, some utilities have specific locational needs that need 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 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 be subject to reverse sensitivity effects. This chapter therefore also addresses requirements for sensitive uses and habitable buildings located near to utilities.

ENERGY AND UTILITIES 30

30.2 Objectives and Policies

Energy

30.2.1 Objective - The benefits of the District's renewable and non-renewable energy resources and the electricity generation facilities that utilise such resources are recognised as locally, regionally and nationally important in the sustainable management of the District's resources.

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 - Recognise that the use and development of renewable energy resources have the following benefits:

- **Maintain or enhance electricity generation capacity while avoiding, reducing or displacing greenhouse gas emissions**
- **Maintain or enhance the security of electricity supply at local, regional and national levels by diversifying the type and/or location of electricity generation**
- **Assist in meeting international climate change obligations**
- **Reduce reliance on imported fuels for the purpose of generating electricity**
- **Help 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:

- Recognises the need to locate renewable electricity generation activities where the renewable electricity resources are available
- Recognises logistical and technical practicalities associated with renewable electricity generation activities
- 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.

ENERGY AND UTILITIES 30

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, ~~on a case-by-case basis~~, with regards to:

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

Commented [CB1]: Submitter 373

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 shall be given to any offset measures (including biodiversity offsets) and/or environmental compensation including those which benefit the local environment and community affected.

Commented [CB2]: Submitter 373

30.2.3.7 Consider non-renewable energy resources including standby power generation and Stand Alone Power systems where adverse effects can be mitigated.

30.2.4 Objective - 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 - ~~Co-ordinate the provision of utilities as necessary to support t~~ The growth and development of the District is supported by utilities that are able to operate effectively and efficiently.

Commented [CB3]: Submitter 781

ENERGY AND UTILITIES 30

Policies

- 30.2.5.1 ~~Essential 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:
- encouraging methods of waste minimisation and reduction such as re-use and recycling
 - providing landfill sites with the capacity to cater for the present and future disposal of solid waste
 - assessing trends in solid waste
 - identifying solid waste sites for future needs
 - consideration of technologies or methods to improve operational efficiency and sustainability (including the potential use of landfill gas as an energy source)
 - 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.~~
- Recognise 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
- 30.2.5.5 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 wellbeing of the community is supported by the establishment, efficient use, continued operation and maintenance of utilities necessary for the well-being of the community.**

Commented [CB4]: Submitter 781

Commented [CB5]: Submitters 179.15, 191.13, 421.12, 781.14

Commented [CB6]: Submitter 781

Commented [CB7]: 781, 805

Policies

- 30.2.6.1 Recognise the need for maintenance or upgrading of a utilities y including regionally significant infrastructure, to ensure its on-going viability and efficiency.

Commented [CB8]: Submitter 805

ENERGY AND UTILITIES 30

30.2.6.2 Consider long term options and economic costs and strategic needs when considering alternative locations, sites or methods for the establishment or alteration of a utility.

When considering the effects of proposed utility developments with adverse environmental effects, consideration shall be given to ~~the consideration of~~ alternatives, but also to how adverse effects have been managed through the route, site and method selection process while taking into account the locational, technical and operational requirements of the utility and the benefits associated with the utility.

Commented [CB9]: Submitter 805.

30.2.6.3 Encourage the co-location of facilities where operationally and technically feasible.

30.2.6.4 Provide for the sustainable, secure and efficient use and development of the electricity transmission network, including within the transmission line corridor, and to protect activities from the adverse effects of the electricity transmission network, including by:

- Controlling the proximity of buildings, structures and vegetation to existing transmission corridors, including buffer distances for managing subdivision and land use development near the National grid.
- Discouraging sensitive activities from locating within or near to the electricity transmission National Grid Yard to minimise potential reverse sensitivity effects on the transmission network
- Managing subdivision within or near to electricity transmission corridors to achieve the outcomes of this policy to facilitate good amenity and urban design outcomes
- Not compromising the operation or maintenance options or, to the extent practicable, the carrying out of routine and planned upgrade works.

Commented [CB10]: Submitter 805.

30.2.6.5 Recognise the presence and function of established network utilities, and their locational and operational requirements, by managing land use, development and/or subdivision in locations which could compromise their safe and efficient operation.

30.2.6.6 Manage adverse effects, including reverse sensitivity effects that could compromise the development, operation, upgrading and maintenance of the identified electricity sub-transmission lines, through the management of activities within an identified buffer corridor.

Commented [CB11]: Submitter 635

30.2.7 ~~Objective - Avoid, remedy or mitigate~~ **The adverse effects of utilities on surrounding environments, particularly those in or on land of high landscape value, and within special character areas are avoided, remedied or mitigated.**

Commented [CB12]: Grammatical change to conform to the Panel's 4th procedural minute.

Policies

30.2.7.1 Reduce adverse effects associated with utilities by:

- Avoiding, remedying or mitigating their location on sensitive sites including heritage and identified sensitive environments special character areas, and protecting Outstanding Natural Landscapes and Outstanding Natural Features, and skylines and ridgelines from inappropriate development.
- Managing adverse effects on the amenity values of urban areas and the Rural Landscapes.
- 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
- Ensuring that redundant utilities are removed
- Using landscaping and or colours and finishes to reduce visual effects
- Integrating utilities with the surrounding environment; whether that is a rural environment or existing built form.

Commented [CB13]: Submitter 519, 251, FS1186, 179.15, 191.13, 421.12, 781.14

Commented [CB14]: Submitters 179.15, 191.13, 421.12, 781.14

ENERGY AND UTILITIES 30

- 30.2.7.2 Require the undergrounding of services in new areas of development where technically feasible.
- 30.2.7.3 Encourage the replacement of existing overhead services with underground reticulation or the upgrading of 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.

30.3 Other Provisions and Rules

30.3.1 District Wide

~~Attention is drawn to the following District Wide Rules. If the District Wide Rules are not met, then consent will be required in respect of that matter.~~

~~All provisions referred to are within Stage 1 of the Proposed District Plan, unless marked as Operative District Plan (ODP).~~

1 Introduction	2 Definitions	3 Strategic Direction
4 Urban Development	5 Tangata Whenua	6 Landscapes
24 Signs (18 Operative DP)	25 Earthworks (22 Operative DP)	26 Historic Heritage
27 Subdivision	28 Natural Hazards	29 Transport (14 Operative DP)
30 Utilities and Renewable Energy	31 Hazardous Substances (16 Operative DP)	32 Protected Trees
33 Indigenous Vegetation	34 Wilding Exotic Trees	35 Temporary Activities and Relocated Buildings
36 Noise	37 Designations	Planning Maps

Commented [CB15]: Non substantive grammatical change for clarity.

Commented [CB16]: Non substantive grammatical change for clarity.

30.3.2 National

30.3.2.1 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 Chapter, to the extent of any inconsistency. No other rules in the District Plan that duplicate or conflict with the Standard shall apply.

Commented [CB17]: Submitter 805

30.3.2.2 Resource Management (National Environmental Standards for Telecommunications Facilities “NESTF”) Regulations 2008:

The Resource Management (National Environmental Standards for Telecommunications Facilities “NESTF”) Regulations 2008 provide for:

- The planning and operation of a telecommunication facility such as a mobile phone transmitter, that generates radio frequency fields as a permitted activity, provided it complies with the New Zealand Standard on Radiofrequency Fields Part 1: Maximum Exposure Levels 3kHz to 300 GHz (NZS 2772.1:1999).

ENERGY AND UTILITIES 30

- The installation of telecommunications equipment cabinets in the road reserve as a permitted activity, subject to specified limitations on their size and location.
- Noise from telecommunications equipment cabinets located in the road reserve as a permitted activity, subject to the specified noise limits.
- The installation or replacement of masts and antennae on existing structures in the road reserve as a permitted activity, subject to specified limitations on height and size.

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

Commented [CB18]: Submitter 805

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

Advice Note:

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

Commented [CB19]: Submitter 805

30.3.2.3 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.

Commented [CB20]: Submitters 805, FS1121

30.3.3 Clarification

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.~~

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 shall apply. Where an activity breaches more than one Standard, the most restrictive status shall apply to the Activity.

30.3.3.3 The rules contained in this Chapter take precedence 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. 26 Historic Heritage
- b. Hazardous Substances (~~16 ODP Operative~~)
- c. Earthworks (22 Operative)

Commented [CB21]: Clarification, non-substantive change.

Commented [CB22]: Submitter 251, 179, 191, 421, 781

30.3.3.4 ~~If District Wide Rules are not met, then consent will be required in respect of that matter.~~

30.3.3.5 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.

Commented [CB23]: Clarification, non-substantive change.

30.3.3.6 The following abbreviations are used in the tables.

P	Permitted	C	Controlled
RD	Restricted Discretionary	D	Discretionary

ENERGY AND UTILITIES 30

NC	Non Complying	PR	Prohibited
----	---------------	----	------------

30.4 Rules - Activities

	Activities for Energy and Utilities	Activity Status
Rules for Energy Activities		
30.4.1	Energy Activities which are not listed in this table	NC
30.4.2	Small and Community-Scale Distributed Electricity Generation and Solar Water Heating with a rated capacity of less than 3.5 <u>5</u> kW (including any structures and associated buildings but excluding Wind Electricity Generation), and not located in any of the sensitive environments identified by Rule 30.4.3.	P
30.4.3	<p>Small and Community-Scale Distributed Electricity Generation and Solar Water Heating (including any structures, associated buildings)</p> <ul style="list-style-type: none"> • With <u>has</u> a rated capacity of more than 3.5kW /OR <p>is located in any of the following sensitive environments:</p> <ul style="list-style-type: none"> • Arrowtown Residential Historic Management Zone • Town Centre Special Character Area • Open Space Zones • Any open space and landscape buffer areas identified on any of the Special Zones • Significant Natural Areas • Outstanding Natural Landscapes • Outstanding Natural Features • Heritage, Features and Landscapes • Rural Zones, <u>Rural Residential Zone, Rural Lifestyle Zone, Gibbston Character Zone</u> (if detached from or separate to outside a building platform). 	D
30.4.4	<p>Renewable Electricity Generation Activities, limited to masts, drilling and water monitoring for the purpose of research and exploratory-scale investigations that are of a temporary nature.</p> <p><u>Excludes the Hydro Generation Zone.</u></p> <p>Discretion is restricted to all of the following:</p> <ul style="list-style-type: none"> • The duration of works and the research purpose • The location of investigation activities and facilities, including proximity to, and effects on, sensitive uses and environments • The height and scale of facilities and potential visual effects 	RD

Commented [CB24]: Submitter 126

Commented [CB25]: Clarification

Commented [CB26]: Submitter 580

Commented [CB27]: Clarification

Commented [CB28]: Submitter 580

ENERGY AND UTILITIES 30

	Activities for Energy and Utilities	Activity Status
	<ul style="list-style-type: none"> Environmental effects Where a site is subject to any natural hazard and the proposal results in an increase in gross floor area: an assessment by a suitably qualified person is provided that addresses the nature and degree of risk the hazard(s) pose to <u>the resilience and operation of the facility and associated buildings, people and property</u>, whether the proposal will alter the risk to any site, and the extent to which such risk can be avoided or sufficiently mitigated¹. 	
30.4.5	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
30.4.6	Non-renewable Electricity Generation where the generation only supplies activities on the site on which it is located and involves either: <ul style="list-style-type: none"> Standby generators associated with community, health care, and utility activities; or Generators that are part of a Stand-Alone Power System on remote sites that do not have connection to the local distributed electricity network. Note – Diesel Generators must comply with the provisions of Chapter 36 (Noise) and Hazardous Substances (Chapter 16 <u>Operative ODP</u>)	P
30.4.7	Non-renewable Electricity Generation not otherwise identified.	NC
Rules for Utilities; and Buildings, Structures and Earthworks within or near to the National Grid Corridor Note – The rules differentiate between four types of activities: lines and support structures; masts and antennae; utility buildings; and flood protection works & waste management facilities.		
30.4.8	Utilities, Buildings, Structures and Earthworks which are not otherwise listed in this table	D
30.4.9	Minor Upgrading	P
30.4.10	Buildings and structures (that are not for National Grid Sensitive Activities), Structures and Earthworks within National Grid Corridors and Electricity Sub-Transmission lines (subject to compliance with Rules 30.5.9, 30.5.10 and 30.5.11)	P
30.4.11	Lines and Supporting Structures A conductor line, or support structures for overhead lines, <u>Subject to Rules 30.4.9 and 30.4.12, new lines and with associated new 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 of equal to or less than</u>	C

Commented [CB29]: Submitter 383

Commented [CB30]: Clarification

Commented [CB31]: Submitters 179, 191, 421, 781

Commented [CB32]: Submitters 383, 836

Commented [CB33]: Submitter 635

Commented [CB34]: Submitters 383, 836 and 635

Commented [CB35]: Submitters 179.15, 191.13, 421.12, 781.14

¹ Policies that guide the assessment of proposals on land affected by natural hazards are located in Chapter 28.

ENERGY AND UTILITIES 30

	Activities for Energy and Utilities	Activity Status
	<p>100MVA); or overhead lines for any other purpose including telecommunications.</p> <p>Control is reserved to all of the following:</p> <ul style="list-style-type: none"> • Location • <u>The adverse effects of the route</u> • Height • Appearance, scale and visual effects • <u>The benefits of the lines to the community and the applicant</u> • Where a site is subject to any natural hazard and the proposal results in an increase in gross floor area: an assessment by a suitably qualified person is provided that addresses the nature and degree of risk the hazard(s) pose to <u>the resilience and operation of the facility and associated buildings</u> people and property; whether the proposal will alter the risk to any site, and the extent to which such risk can be avoided or sufficiently mitigated¹. 	
30.4.12	<p>Lines and Supporting Structures</p> <p><u>Subject to Rule 30.4.9, new lines and with associated new 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 of equal to or less than 100MVA); or overhead lines for any other purpose including telecommunications. Any line or support structure</u> where it involves:</p> <p>30.4.12.1 Erecting any lattice towers for overhead lines to convey electricity in all zones.</p> <p>30.4.12.2 Erecting any <u>lines, lattice towers or support structures</u> for new overhead lines to convey electricity (at a voltage of more than 110kV with a capacity over 100MVA) in all zones.</p> <p>30.4.12.3 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); or overhead lines for any other purposes including telecommunications in any Outstanding Natural Feature or Outstanding Natural Landscape or Significant Natural Areas.</p> <p>30.4.12.4 Utilising any existing support structures for the erection of cable television aerials and connections.</p> <p>30.4.12.5 Erecting any support structures for overhead lines for any purpose in the area in Frankton known as the "Shotover Business Park", except where any new poles are solely for the purpose of providing street lighting.</p>	D

Commented [CB36]: Submission 383

Commented [CB37]: Submitters 179.15, 191.13, 421.12, 781.14

Commented [CB38]: Submitters 179.15, 191.13, 421.12, 781.14

ENERGY AND UTILITIES 30

	Activities for Energy and Utilities	Activity Status
30.4.13	<p>Telecommunications or radio communication, navigation or meteorological communication facilities:</p> <p>With a maximum height no greater than:</p> <p>12m in the Queenstown Business Mixed Use zone;</p> <p>15m in the High Density Residential Queenstown – Flat, Queenstown Town Centre, Wanaka Town Centre (Wanaka Height Precinct) or Airport Mixed Use zones;</p> <p>10m in the Local Shopping Centre, Wanaka Business Mixed Use or Jacks Point zones; and</p> <p>8m in any other zone.</p>	P
30.4.14	<p>Telecommunications or radio communication, navigation or meteorological communication facilities masts:</p> <p>With a maximum height no greater than:</p> <p>8m in any identified Outstanding Natural Landscape or Feature;</p> <p>15m in the Queenstown Business Mixed Use zone and Rural Zone;</p> <p>18m in the High Density Residential Queenstown – Flat, Queenstown Town Centre, Wanaka Town Centre (Wanaka Height Precinct) or Airport Mixed Use zones;</p> <p>13m in the Local Shopping Centre, Wanaka Business Mixed Use or Jacks Point zones; and</p> <p>11m in any other zone; and</p> <p>Where located in an Outstanding Natural Landscape or Feature, the colour of the mast and any attachments is matched to the local environment and has a reflectivity value of less than 37%; and</p> <p>located not located in</p> <ul style="list-style-type: none"> • the Arrowtown Residential Historic Management Zone, • Arrowtown Town Centre, • Queenstown Special Character Area, • Significant Natural Areas and • Heritage, Features and Landscapes. <p>Control is reserved to all of the following:</p> <ul style="list-style-type: none"> • Location • Route • Height • Appearance, scale and visual effects 	GP
30.4.15	<p>Telecommunications or radio communication, navigation or meteorological communication facilities:</p> <p>located in</p> <ul style="list-style-type: none"> • any identified Outstanding Natural Landscape or Feature, • the Arrowtown Residential Historic Management Zone, • Arrowtown Town Centre, • Queenstown Special Character Area, • Significant Natural Areas and • Heritage, Features and Landscapes. 	D

Commented [CB39]: Submitters 179.15, 191.13, 421.12, 781.14

Commented [CB40]: Submitters 179.15, 191.13, 421.12, 781.14

Commented [CB41]: Submitters 179.15, 191.13, 421.12, 781.14

ENERGY AND UTILITIES 30

	Activities for Energy and Utilities	Activity Status
30.4.16	<p><u>New Buildings and Structures ancillary to or associated with Utilities provided:</u></p> <p><u>Subject to Rule 30.4.18, the addition, alteration or construction of structures up to than 10m² in area and 3m in height (other than masts for any telecommunication and radio communication facility, navigation or meteorological communication facility or supporting structures for lines). The building or cabinet or structure is less than 10m² in total footprint or less than 3m in height.</u></p>	P
30.4.1517	<p><u>Structures ancillary to or associated with Utilities Buildings (associated with a Utility)</u></p> <p><u>Subject to Rule 30.4.18, The addition, alteration or construction of structures buildings greater than 10m² in area and 3m in height (other than masts for any telecommunication and radio communication facility, navigation or meteorological communication facility or supporting structures for lines). However, this rule shall not apply where the provisions of the underlying zone or a District Wide rule specify a more restrictive activity status.</u></p> <p>Control is reserved to all of the following:</p> <ul style="list-style-type: none"> • Location • External appearance, <u>colour</u> and visual effects • <u>The mitigation of the adverse effect of any a</u> associated earthworks • <u>The adequacy of p</u>arking and access • Landscaping • Where a site is subject to any natural hazard and the proposal results in an increase in gross floor area: an assessment by a suitably qualified person is provided that addresses the nature and degree of risk the hazard(s) pose to <u>the resilience and operation of the facility and associated buildings</u> people and property; whether the proposal will alter the risk to any site, and the extent to which such risk can be avoided or sufficiently mitigated¹. 	C
30.4.18	<p><u>Structures ancillary to or associated with Utilities Buildings (associated with a Utility)</u></p> <p><u>Any addition, alteration or construction of buildings and structures, (other than masts for any telecommunication and radio communication facility, navigation or meteorological communication facility or supporting structures for lines) in:</u></p> <ul style="list-style-type: none"> • <u>Any Significant Natural Areas</u> • <u>The Arrowtown Residential Historic Management Zone.</u> • <u>The Remarkables Park Zone; and</u> • <u>If greater than 10m² in area and 3m in height in any Outstanding Natural Landscapes or Features.</u> 	D

Commented [CB42]: Submitters 179.15, 191.13, 421.12, 781.14 and 251

Commented [CB43]: Multiple submitters including 191, 251, 635, 805

Commented [CB44]: Submission 383

Commented [CB45]: Submitters 179.15, 191.13, 421.12, 781.14 notified 30.4.16

ENERGY AND UTILITIES 30

	Activities for Energy and Utilities	Activity Status
30.4.19	<p>Antennas</p> <p>Provided the maximum surface area is no greater than 1.5m² if circular shaped, an antenna less than 1.2m in diameter. If another shape, an antenna less than 1.2m in length or breadth, and for whip antennas, less than 4m in length.</p> <p>Where located in an Outstanding Natural Landscape or Feature, the colour of the antenna and any attachments is matched to the local environment and has a reflectivity value of less than 37%;</p>	P
30.4.20	<p>Antennas</p> <p>Subject to Rule 30.4.21, provided the surface area is between 1.5m² and 4m² and for If circular shaped, an antenna greater than 1.2m in diameter but less than 2.4m in diameter. If another shape, an antenna greater than 1.2m in length or breadth but less than 2.4m in length and breadth. 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"> • Location • Route • Height • Appearance, colour scale and visual effects 	C
30.4.21	<p>Antennas more than 2.4m in diameter, length or breadth and/or 4m in length for whip antennas in rural zone. OR, any antennas located in the following:</p> <p>Where the surface area is greater than 4m²; or</p> <p>Where the surface area is greater than 1.5m² and the antenna is located in:</p> <ul style="list-style-type: none"> • any identified Outstanding Natural Landscape or Feature, • the Arrowtown Residential Historic Management Zone, • Arrowtown Town Centre, • Queenstown Special Character Area, • Significant Natural Areas and • Heritage, Features and Landscapes. 	D
30.4.22	<p>The construction, alteration, or addition to underground lines for electricity or telecommunication purposes when:</p> <p>the ground surface is reinstated to the state it was prior to works commencing.</p> <p>Note – Refer to the Operative Earthworks chapter.</p>	P
30.4.13	<p>Telecommunication Facility and Radio communication Facilities Navigation, Meteorological Facilities</p> <p>Any telecommunication and radio communication facility, navigation or meteorological communication facility where it involves erecting:</p>	C

Commented [CB46]: Submitters 179.15, 191.13, 421.12, 781.14

Commented [CB47]: Submitters 179.15, 191.13, 421.12, 781.14

Commented [CB48]: Submitters 179.15, 191.13, 421.12, 781.14

Commented [CB49]: Submitters 179.15, 191.13, 421.12, 781.14 and 251

Commented [CB50]: Submitters 179, 191, 421, 781
Notified 30.4.13, redrafted in 30.4.14 and 30.4.19 and 30.4.20

ENERGY AND UTILITIES 30

	Activities for Energy and Utilities	Activity Status
	<p>30.4.13.1 Within the Rural Zone any mast greater than 8m but less than or equal to 15m in height.</p> <p>30.4.13.2 Within the Town Centre Zones any mast greater than 8m but less than or equal to 10m in height.</p> <p>30.4.13.3 in zones with a maximum building height of less than 8m (except for the Business and Industrial Zones), a mast greater than the maximum height permitted for buildings of the zone or activity area in which it is located.</p> <p>30.4.13.4 If circular shaped an antenna greater than 1.2m in diameter but less than 2.4m in diameter. If another shape, an antenna greater than 1.2m in length or breadth but less than 2.4m in length and breadth.</p> <p>Control is reserved to all of the following:</p> <ul style="list-style-type: none"> • Site location • External appearance • Access and parking • Visual amenity impacts • Where a site is subject to any natural hazard and the proposal results in an increase in gross floor area: an assessment by a suitably qualified person is provided that addresses the nature and degree of risk the hazard(s) pose to people and property, whether the proposal will alter the risk to any site, and the extent to which such risk can be avoided or sufficiently mitigated¹. 	
30.4.14	<p>Telecommunication and Radio communication Facilities, Navigation, Meteorological Facilities where it involves:</p> <p>30.4.14.1 Erecting any mast, or erecting any antenna greater than 1.2m in diameter (if circular in shape) or 1.2m in length or breadth (if another shape) in:</p> <ul style="list-style-type: none"> • Any Outstanding Natural Landscape or Outstanding Natural Feature • Significant Natural Area • The Arrowtown Residential Historic Management Zone. • Any open space and landscape buffer areas identified on any of the Special Zone structure plans • Town Centre Special Character Areas • Heritage Features and Landscapes. <p>30.4.14.2 Erecting antenna greater than 2.4m in diameter or 3m in length or breadth, except omni directional (or "whip") antenna which shall not exceed 4m length, in the following zones: Residential (other than the Arrowtown Residential Historic Management Zone), Rural Lifestyle, Rural Residential, Township, Resort, Airport Mixed Use, Visitor, Town Centre,</p>	D

Commented [CB51]: Submitters 179.15, 191.13, 421.12, 781.14 notified 30.4.14; redrafted 30.4.15

ENERGY AND UTILITIES 30

	Activities for Energy and Utilities	Activity Status
	<p>Corner Shopping Centre, Bendemeer, Penrith Park and Business Zones.</p> <p>30.4.14.3 Erecting any antenna greater than 2.4m in diameter length or breadth and/or 4m in length if a whip antenna, in the Rural Zone.</p> <p>30.4.14.4 Erecting a mast which is over 15m in height in the Rural Zone.</p> <p>30.4.14.5 In all other zones including the Town Centre Zones with a maximum building height of less than 8m (except the Business and Industrial Zones) and erecting a mast which is over 10m in height.</p> <p>30.4.14.6 In the Business and Industrial Zones and in all other zones with a maximum building height of 8m or greater, erecting a mast which exceeds the maximum height of buildings in the zone it is located by more than 5m.</p>	
30.4.16	<p>Buildings (associated with a Utility)</p> <p>Any addition, alteration or construction of buildings and structures, (other than masts for any telecommunication and radio communication facility, navigation or meteorological communication facility or supporting structures for lines) in:</p> <ul style="list-style-type: none"> • Any Significant Natural Areas • The Arrowtown Residential Historic Management Zone. • The Remarkables Park Zone <p>However, this rule shall not apply where the provisions of the underlying zone or a District Wide matter specify a more restrictive activity status.</p>	D
30.4.1723	<p>Flood Protection Works for the maintenance, reinstatement, repair or replacement of existing flood protection works for the purpose of:</p> <ul style="list-style-type: none"> • maintaining the flood carrying capacity of water courses and/or maintaining the integrity of existing river protection works • fill works undertaken within Activity Area 1f of the Shotover Country Special Zone. 	P
30.4.1824	<p>Flood Protection Works not otherwise identified.</p>	D
30.4.1925	<p>Waste Management Facilities</p>	D
30.4.2026	<p>Water and Wastewater Treatment Facilities</p>	D
30.4.247	<p>In the Remarkables Park Zone, all lattice towers or overhead lines or support structures for overhead lines for any purpose (except any poles solely for the purpose of street lighting); or any mast for any purpose; or any antenna greater than 1.5m² in surface area 1.2m in diameter, length</p>	NC

Commented [CB52]: Submitters 179.15, 191.13, 421.12, 781.14 notified 30.4.16 redrafted 30.4.18

ENERGY AND UTILITIES 30

	Activities for Energy and Utilities	Activity Status
	or breadth (except omni-directional or 'whip' antenna less than 4 metres in length).	
30.4.28	<p>Microcells</p> <p><u>A small cell and associated antennas, with a volume of no greater than 0.11m³.</u></p>	P
30.4.29	<p>Microcells</p> <p><u>A small cell and associated antennas, with a volume of between 0.11m³ and 2.5m³.</u></p> <p><u>Control is reserved to all of the following:</u></p> <ul style="list-style-type: none"> • <u>Appearance, colour, and visual effects</u> 	C

30.5 Rules – Standards

	Standards for activities	Non-compliance status
Standards for Energy Activities		
30.5.1	<p>Small and Community-Scale Distributed Electricity Generation and Solar Water Heating shall:</p> <p>30.5.1.1 not overhang the edge of any building.</p> <p>30.5.1.2 Solar Electricity Generation cells, modules and panels and Solar Water Heating collector panels shall be recessive colours: black, dark blue, grey or brown. Frames, mounting, fixing hardware shall be finished in similar recessive colours <u>with a light reflectance value of less than 36%.</u> Recessive colours shall be selected to be the closest colour to the building to which they form part of, are attached to, or service.</p> <p>30.5.1.3 be set back in accordance with the internal and road boundary setbacks for buildings in the zone in which they are located. Exemptions for accessory buildings shall not apply.</p> <p>30.5.1.4 not intrude through any recession planes applicable in the zone in which they are located.</p> <p>30.5.1.5 For solar panels on a sloping roof, may protrude a maximum of 0.5 m above the maximum height limit specified for the zone.</p> <p>30.5.1.6 For solar panels on a flat roof, may protrude a maximum of 1.0 m above the maximum height limit specified for the zone, for a maximum area of 5m².</p>	D

Commented [CB53]: Submitter 383

ENERGY AND UTILITIES 30

	Standards for activities	Non-compliance status
	<p>30.5.1.7 not exceed 2.0 metres in height if for free standing Solar Electricity Generation and Solar Water Heating.</p> <p>30.5.1.8 not exceed 150 m² in area if for free standing Solar Electricity Generation and Solar Water Heating.</p> <p>30.5.1.9 <u>be located within an approved building platform and not exceed the site coverage requirements of the underlying zone.</u></p>	
30.5.2	<p>Mini and Micro Hydro Electricity Generation shall:</p> <p>30.5.2.1 comply with Road and Internal Boundary Building Setbacks in the zone in which they are located.</p> <p>30.5.2.2 not exceed 2.5 metres in height.</p> <p>30.5.2.3 be finished in recessive colours <u>with a light reflectance value of less than 36%</u>, consistent with the building it is servicing on site.</p> <p>Note: Reference should also be made to the Otago Regional Council Water Plan Rules.</p>	D
30.5.3	<p>Wind Electricity Generation shall:</p> <p>30.5.3.1 comprise no more than two Wind Electricity Generation turbines or masts on any site.</p> <p>30.5.3.2 involve no lattice towers.</p> <p>30.5.3.3 be set back in accordance with the internal and road boundary setbacks for buildings in the zone in which they are located. Exemptions for accessory buildings shall not apply.</p> <p>30.5.3.4 not exceed the maximum height or intrude through any recession planes applicable in the zone in which they are located.</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>30.5.3.5 be painted in non-reflective paint <u>with a light reflectance value of less than 36%</u>.</p>	D
30.5.4	<p>Biomass Electricity Generation</p> <p>30.5.4.1 Biomass Electricity Generation fuel material shall be sourced on the same site as the generation plant, except where the generation plant is located</p>	D

Commented [CB54]: Submitters 126 and 368

Commented [CB55]: Submitter 383

Commented [CB56]: Submitter 383

ENERGY AND UTILITIES 30

	Standards for activities	Non-compliance status
	<p>in Industrial Zones (and Industrial Activities Areas within Structure Plans).</p> <p>30.5.4.2 Any outdoor storage of Biomass Electricity Generation fuel material shall be screened from adjoining sites and public places.</p> <p>30.5.4.3 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 Air Plan Rules.</p>	
30.5.5	<p>Associated buildings</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>30.5.5.1 not exceed 10m² in area and 2.5 3m in height.</p> <p>30.5.5.2 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>30.5.5.3 be finished in recessive colours with a light reflectance value of less than 36%, consistent with the building it is servicing on site.</p>	D
Standards for Utilities		
30.5.6	<p>Setback from internal boundaries and road boundaries</p> <p>Where the utility is a building, it shall be set back in accordance with the internal and road boundary setbacks for accessory buildings in the zone in which it is located.</p>	D
30.5.7	<p>Buildings in Outstanding Natural Landscapes (ONL) and Outstanding Natural Features (ONF)</p> <p>Any building within an ONL or ONF shall be less than 10m² in area and less than 3m in height.</p>	D
30.5.8	<p>Height</p> <p>All buildings or structures, (excluding masts and antennae for any telecommunication and radio communication facility, navigation or meteorological communication facility) shall comply with the relevant maximum height provisions for buildings of the zone they are located in.</p>	D
30.5.9	<p>New Zealand Standards</p> <p>All development of utilities including associated earthworks shall comply with NZS4404:2011.</p>	D

Commented [CB57]: Submitters 179.15, 191.13, 421.12, 781.14

Commented [CB58]: Submitter 383

Commented [CB59]: Submitters 383, 179, 191, 421, 781, FS1121

ENERGY AND UTILITIES 30

	Standards for activities	Non-compliance status
30.5.409	<p>Buildings and Structures permitted within the National Grid Yard include being:</p> <p>30.5.940.1 A non-conductive fence located 5m or more from any National Grid Support Structure and no more than 2.5m in height.</p> <p>30.5.940.2 Any utility within a transport corridor or any part of electricity infrastructure that connects to the National Grid.</p> <p>30.5.940.3 Any new non-habitable building less than 2.5m high and 10m² in floor area.</p> <p>30.5.940.4 Any non-habitable building or structure used for agricultural activities provided that they are:</p> <ul style="list-style-type: none"> a. less than 2.5m high b. Located at least 12m from a National Grid Support Structure c. Not a milking shed/dairy shed (excluding the stockyards and ancillary platforms), or a commercial glasshouse. <p>30.5.940.5 Alterations to existing buildings that do not alter the building envelope.</p> <p>Note – Refer to the Definitions for illustration of the National Grid Yard.</p>	NC
30.5.10	<p><u>Buildings and Structures and Earthworks permitted within the Electricity Sub-Transmission Corridor include:</u></p> <p><u>Within 10m of a centre line in the corridor:</u></p> <p>30.5.10.1 <u>Any building or structure that does not require building consent; or,</u></p> <p><u>Alteration of any building that does not exceed outside the envelope or footprint of the existing building.</u></p> <p>30.5.10.2 <u>Earthworks that:</u></p> <ul style="list-style-type: none"> a. <u>Are not directly above an underground cable(s); and</u> b. <u>Do not result in a reduction of existing ground clearance distances from overhead lines below the minimums prescribed in the New Zealand Code of Practice 34:2001 (NZECP 34:2001); and</u> c. <u>Are in accordance with NZECP 34:2001.</u> 	NC

Commented [CB60]: Submitter 635

Commented [CB61]: Submitter 635

ENERGY AND UTILITIES 30

	Standards for activities	Non-compliance status
30.5.11	<p>Earthworks <u>permitted</u> within the National Grid Yard <u>being include</u>:</p> <p>30.5.11.1 Earthworks within 2.2 metres of a National Grid pole support structure or stay wire shall be no deeper than 300mm.</p> <p>30.5.11.2 Earthworks between 2.2 metres to 5 metres of a National Grid pole support structure or stay wire shall be no deeper than 750mm.</p> <p>30.5.11.3 Earthworks within 6 metres of the outer visible edge of a National Grid Transmission Tower Support Structure shall be no deeper than 300mm.</p> <p>30.5.11.4 Earthworks between 6 metres to 12 metres from the outer visible edge of a National Grid Transmission Tower Support structure shall be no deeper than 3 metres.</p> <p>30.5.11.5 Earthworks shall not create an unstable batter that will affect a transmission support structure.</p> <p>30.5.11.6 Earthworks shall not result in a reduction in the existing conductor clearance distance below what is required by the New Zealand Electrical Code of Practice 34:2001.</p> <p>The following earthworks are exempt from the rules above:</p> <p>30.5.11.7 Earthworks undertaken in the course of constructing or maintaining utilities</p> <p>30.5.11.8 Earthworks undertaken as part of agricultural activities or domestic gardening</p> <p>30.5.11.9 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>	D

Commented [CB62]: Submitter 635

30.6 Rules - Non-Notification of Applications

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

30.6.1.1 ~~Stand Alone Power Systems (SAP's).~~

Commented [CB63]: Submitter 20

30.6.1.2 ~~Small and Community Scale Distributed Electricity Generation.~~

Commented [CB64]: Submitter 20

30.6.1.3~~1~~ Controlled activities.

30.6.1.4~~2~~ Discretionary activities for Flood Protection Works.

ENERGY AND UTILITIES 30

RECOMMENDED CHANGES TO DEFINITIONS

Minor Upgrading	<p>Means <u>an increase in the carrying capacity, efficiency or security of electricity transmission and distribution or telecommunication lines utilising the existing support structures or structures of a similar scale, intensity and character, maintenance, replacement and upgrading of existing conductors or lines and support structures provided they are of a similar character, intensity and scale to the existing conductors or line and support structures and shall include the following:</u></p> <ul style="list-style-type: none"> a) <u>Addition of lines, circuits and conductors;</u> b) <u>Reconducting of the line with higher capacity conductors;</u> c) <u>Re-sagging of conductors;</u> d) <u>Bonding of conductors;</u> e) <u>Addition or replacement of longer or more efficient insulators;</u> f) <u>Addition of electrical fittings or ancillary telecommunications equipment;</u> g) <u>Addition of earth-wires which may contain lightning rods, and earth-peaks;</u> h) <u>Support structure replacement within the same location as the support structure that is to be replaced;</u> i) <u>Addition or replacement of existing cross-arms with cross-arms of an alternative design; and</u> <ul style="list-style-type: none"> • Replacement of existing support structure poles provided they are less or similar in height, diameter and are located within 1 metre of the base of the support pole being replaced; • Addition of a single service support structure for the purpose of providing a service connection to a site, except in the Rural zone; • The addition of up to three new support structures extending the length of an existing line provided the line has not been lengthened in the preceding five-year period, except in the Rural Zone; • Replacement of conductors or lines provided they do not exceed 30mm in diameter or the bundling together of any wire, cable or similar conductor provided that the bundle does not exceed 30mm in diameter; • Re-sagging of existing lines; • Replacement of insulators provided they are less or similar in length; and • Addition of lightning rods, earth-peaks and earth-wires;
National Grid <u>Subdivision</u> Corridor	<p>Means the area measured either side of the centreline of above ground National Grid line as follows:</p> <ul style="list-style-type: none"> • 16m for the 110kV lines on pi poles • 32m for 110kV lines on towers • 37m for the 220kV transmission lines. <p>Note: The National Grid <u>Subdivision</u> Corridor does not apply to underground cables or any transmission lines (or sections of line) that are designated.</p>
National Grid Yard	<p>Means:</p> <ul style="list-style-type: none"> • the area located 12 metres in any direction from the outer edge of a National Grid support structure; and • the area located 12 metres either side of the centreline of any overhead National Grid line; <p>(as shown in dark grey in diagram below)</p>

Commented [CB65]: Submitters 251, 635, 805

Commented [CB66]: Submitter 805

ENERGY AND UTILITIES 30



Commented [CB67]: Submitter 836

ENERGY AND UTILITIES 30

	<p style="text-align: center;"> Centreline Single Pole Pi Pole Tower </p>
	<p>Note: The National Grid Yard does not apply to underground cables or any transmission lines (or sections of line) that are designated.</p>
National Grid Sensitive Activities	<p>Means <u>those activities within the National Grid Corridor that are particularly sensitive to the risks associated with electricity transmission lines because of either the potential for prolonged exposure to the risk or the vulnerability of the equipment or population that is exposed to the risk. Such activities include buildings or parts of buildings used for, or able to be used for the following purposes:</u></p> <ul style="list-style-type: none"> • Child Day Care activity; • Day Care <u>facility activity;</u> • Educational <u>facility activity, except training related to the National Grid;</u> • Home Stay; • <u>Healthcare facility Hospital activity;</u> • Papakainga; • <u>Any Residential activity;</u> • Residential Care activity; or • Visitor <u>accommodation.</u>
Sensitive activities – Transmission corridor	<p>Means those activities within an Electricity Transmission Corridor that are particularly sensitive to the risks associated with electricity transmission lines because of either the potential for prolonged exposure to the risk or the vulnerability of the equipment or population that is exposed to the risk. Such activities include any residential activity, visitor accommodation, educational facility, healthcare facility and day care facility.</p>

Commented [CB68]: Submitters 383, 836

Commented [CB69]: Submitters 383, 805

ENERGY AND UTILITIES 30

Telecommunication s Facility	Means devices, such as aerials, dishes, antennae, <u>wi-fi and microcells, lines (including cables), wires, cables</u> , casings, tunnels and associated equipment and support structures, and equipment shelters, such as towers, masts and poles, and equipment buildings and <u>telecommunication kiosks</u> telephone boxes, used for the transmitting, emission or receiving of communications.
Utility	<p>Means the systems, services, structures and networks necessary for operating and supplying essential utilities and services to the community including but not limited to:</p> <ul style="list-style-type: none"> • <u>substations, transformers</u>, lines and necessary and incidental structures and equipment for the transmissions and distribution of electricity; • pipes and necessary incidental structures and equipment for transmitting and distributing gas; • storage facilities, pipes and necessary incidental structures and equipment for the supply and drainage of water or sewage; • water and irrigation races, drains, channels, pipes and necessary incidental structures and equipment (excluding water tanks); • structures, facilities, plant and equipment for the treatment of water; • structures, facilities, plant, equipment and associated works for receiving and transmitting telecommunications and radio communications (see definition of telecommunication facilities); • structures, facilities, plant, equipment and associated works for monitoring and observation of meteorological activities and natural hazards; • structures, facilities, plant, equipment and associated works for the protection of the community from natural hazards; • structures, facilities, plant and equipment necessary for navigation by water or air; • waste management facilities; • <u>flood protection works</u>; and • Anything described as a network utility operation in s166 of the Resource Management act 1991 <p>Utility does not include structures or facilities used for electricity generation, the manufacture and storage of gas, or the treatment of sewage.</p>
<u>Electricity Sub-Transmission Lines</u>	<p>Means the conveyance of electricity via sub-transmission (operating at 22kV, 33kV and 66kV) lines and cables (aerial and underground), support structures and substations operated by a Network Utility Operator.</p> <p><u>Advice note: Only transmission and electricity sub-transmission lines are identified on the planning maps, however, works in close proximity to all electric lines can be dangerous. Compliance with NZECP 34:2001 is mandatory for buildings, earthworks, and when using machinery or equipment within close proximity to any electric lines.</u></p>
<u>Electricity Sub-Transmission Corridor</u>	<p>Means the area located 10 metres either side of the centreline of any overhead Sub-Transmission line (as shown in blue in the diagram below).</p> <p><u>Distances from Electricity Sub-Transmission Lines are to be measured from a point directly below the centreline of the line or cluster of lines, as shown in below.</u></p>

Commented [CB70]: Submitters 179, 191, 421, 781

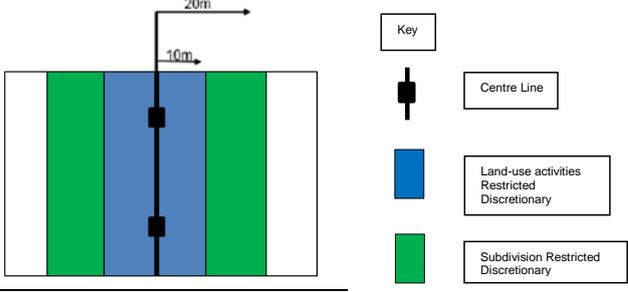
Commented [CB71]: Submitters 635 FS1301

Commented [CB72]: Submitter 383

Commented [CB73]: Submitter 635

Commented [CB74]: Submitter 635

ENERGY AND UTILITIES 30

	
<p><u>Electricity Distribution</u></p>	<p>Means the conveyance of electricity via electricity distribution lines, cables, support structures, substations, transformers, switching stations, kiosks, cabinets and ancillary buildings and structures, including communication equipment, by a network utility operator.</p>
<p><u>Energy Activities</u></p>	<p>Includes the following:</p> <ul style="list-style-type: none"> • <u>Small and Community-Scale Distributed Electricity Generation and Solar Water Heating</u> • <u>Renewable Electricity Generation</u> • <u>Non-renewable Electricity Generation</u> • <u>Wind Electricity Generation</u> • <u>Solar Electricity Generation</u> • <u>Stand-Alone Power Systems (SAPS)</u> • <u>Biomass Electricity Generation</u> • <u>Hydro Generation Activity</u> • <u>Mini and Micro Hydro Electricity Generation.</u>
<p><u>Regionally significant infrastructure</u>²</p>	<p>Regionally significant infrastructure means:</p> <p>a) <u>Renewable electricity generation facilities, where they supply the National Grid and local distribution network and are operated by an electricity operator; and</u></p> <p>b) <u>Electricity transmission infrastructure forming the National Grid and Electricity Sub-Transmission Lines; and</u></p> <p>c) <u>Telecommunication and radio communication facilities; and</u></p> <p>d) <u>Key centralised Council infrastructure, including water reservoirs, and wastewater treatment plants; and</u></p> <p>e) <u>Roads classified as being of national or regional importance; and</u></p> <p>f) <u>Queenstown and Wanaka airports</u></p>
<p><u>Support Structure</u></p>	<p>Means a utility pole or tower that forms part of the electricity distribution or transmission network that supports conductors as part of a line. This includes any ancillary equipment, such as communication equipment or transformers.</p>
<p><u>National Grid</u></p>	<p>Means the same as in the Resource Management (National Environmental Standards for Electricity Transmission Activities) Regulations 2009.</p>

Commented [CB75]: Submitter 635 FS1301

Commented [CB76]: Submitter 383

Commented [CB77]: Submitter 635

Commented [CB78]: This definition was recommended in the Council's reply on the Strategic Direction Chapter. The further change recommended is the addition at b) 'and Electricity Sub-Transmission Lines'.

Commented [CB79]: Submitter 635 FS1301

Commented [CB80]: Submitter 805

² Derived from the version in Mr Matthew Paetz's Right of Reply chapter 3 Strategic Directions dated 7 April 2016.