Section 32 Evaluation Report: Energy and Utilities

1. Strategic Context

Council is preparing a new district plan under section 74 of the Resource Management Act 1991 (RMA or the Act). Section 74(1) sets out matters which are to be considered by territorial authorities when preparing or changing district plans. That section states that district plans must be prepared in accordance with the functions for territorial authorities set out in section 31, the provisions of Part 2, the duties under section 32, and any regulations.

Section 74(2) of the Act requires that when preparing or changing a district plan, a territorial shall have regard to:

(a) any –
- *(i) Proposed regional policy statement; or*
- *(ii) Proposed regional plan of its region in regard to any matter of regional significance or for which the regional council has primary responsibility under Part 4; and*

(b) any-
- *(i) Management plans and strategies prepared under other Acts; and*
- *(ii) Repealed*
- *(iia) Relevant entry [on the New Zealand Heritage List/Rarangi Korero required by the Heritage New Zealand Pouhere Taonga Act 2014]; and*
- *(iii) Regulations relating to ensuring sustainability, or the conservation, management, or sustainability of fisheries resources (including regulations or bylaws relating to taiapure, mahinga mataitai, or other non-commercial Maori customary fishing),—*

to the extent that their content has a bearing on resource management issues of the district; and

(c) The extent to which the district plan needs to be consistent with the plans or proposed plans of adjacent territorial authorities.

Section 74(2A) requires that when preparing a district plan a territorial authority must take into account:

> *Any relevant planning document recognised by an iwi authority and lodged with the territorial authority, to the extent that its content has a bearing on the resource management issues of the district.*

Section 75 of the Act details the requirements for the content of district plans. Section 75 of the Act states that:

(3) A district plan must give effect to –
- *a) any national policy statement; and*
- *b) any New Zealand coastal policy statement; and*
- *c) any regional policy statement.*

(4) A district plan must not be inconsistent with -
- *a) a water conservation order; or*
- *b) a regional plan for any matter specified in section 30(1).*

Consideration has been given to the matters detailed in sections 74 and 75 of the Act, as outlined in Sections 2 to 5 below.

2. National Planning Documents

National Policy Statements

There are currently four operative National Policy Statements which the Queenstown Lakes District Plan must give effect to. These include:

- The New Zealand Coastal Policy Statement 2010

- The National Policy Statement for Renewable Electricity Generation 2011 (NPS-REG")
- The National Policy Statement for Freshwater Management 2011
- The National Policy Statement for Electricity Transmission 2008 ("NSPET")

All of the above policy statements (with the exception of the Coastal Policy Statement) are relevant to the consideration of Energy and Utilities activities within the District. Details of how the proposed provisions in Chapter 17 give effect to these National Policy Statements is discussed further in this report below.

National Environmental Standards

National environmental standards are regulations made under section 43 of the RMA. They can prescribe technical standards, methods or other requirements for environmental matters. In some circumstances, local authorities can impose stricter standards. There are three national environmental standards which are relevant to the proposed chapter, these include:

- The National Environmental Standards for Electricity Transmission Activities;
- The National Environmental Standards for Telecommunication Facilities Regulations 2008; and
- The National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health 2012.

Proposed Chapter 17 does not impose a greater prohibition or restriction on an activity to which the various National Environmental Standards ("NES") already imposes. Therefore, no further evaluation of these NES standards is required for this evaluation (section 32(4)).

3. Regional Planning Documents

Regional Policy Statement

Otago's Regional Policy Statement ("**RPS**") promotes the sustainable management of natural and physical resources by giving an overview of the resource management issues facing Otago, and by setting policies and methods to manage Otago's natural and physical resources. The RPS is currently under Review itself, and may be further advanced in that process by the time the District Plan Review is notified. Amendments to this evaluation may be required to accommodate that change. The Operative District Plan must *give effect* to the Operative RPS and must *have regard to* the Proposed RPS.

The Operative RPS contains chapters 6, 7, 12 and 13 (Water, Air, Energy and Waste) which are relevant to the Energy and Utilities Chapter. The relevant objectives and policies include objectives 6.4.1, 6.4.3, 6.4.4, 6.4.7 and 6.4.8 and policy 6.5.1; objectives 7.4.1 and policy 7.5.5; objectives 12.4.1 - 12.4.3 and policies 12.5.1 - 12.5.2 and 12.5.4 and objective 13.4.1 and policy 13.5.1 and 13.5.2. As outlined in detail in **Attachment 1**, proposed Chapter 17 is consistent with, and gives effect to, the relevant operative RPS provisions.

Regional Plans

There are four operative regional plans within the Otago Region relating to air, water, coast and waste. The purpose of the Otago Regional Plan: Air is to promote the sustainable management of the air resource in the Otago region. The Otago Regional Plan: Water is for the use, development and protection of Otago's rivers, lakes, aquifers and wetlands. The Otago Regional Plan: Coast is relevant to the coastal marine area. The Otago Regional Plan: Waste applies to solid waste management, including waste minimisation, contaminated sites, hazardous substances and hazardous wastes and landfills. Chapter 17 does not seek to address any matters that are managed under the Otago Regional Plans for the Coast.

The Regional Plan - Air includes relevant objective 6.1.1 relating to energy emissions and associated policy 6.1.2 which are relevant to Chapter 17. The provisions recognise that the management of waterways associated with Mini and Micro Hydro Electricity Generation activities are also governed by the Otago Regional Council Water Plan rules.

The Regional Plan – Water includes a number of objectives and policies which relate specifically to Hydro Electricity and flood protection works which are relevant to Chapter 17 (objectives 5.3.1 – 5.3.7;

6.3.1 – 6.3.7; 6.6A.3; 8.3.1 – 8.3.11 and 10.31). The provisions recognise that the management of air discharges from Biomass Electricity Generation are also governed by the Otago Regional Council Air Plan rules.

The Regional Plan – Waste includes a number of objectives and policies which relate specifically to the management and control of waste in sections 6.3 and 7.3 which are relevant to Chapter 17.

4. Iwi Management Plans

Kai Tahu Ki Otago Resource Management Plan

The Kai Tahu Ki Otago Resource Management Plan (2005) (NRMP) is the principal planning document for Kai Tahu Ki Otago (KTKO) ((KTKO is used to describe the four Papatipu Runanga and associated whanau and ropu of the Otago Region). Chapter 5 of the NRMP identifies issues, objectives and policies for the Otago Region as a whole, and includes the following objectives:

i. The rakätirataka and kaitiakitaka of Käi Tahu ki Otago is recognised and supported.

ii. Ki Uta Ki Tai management of natural resources is adopted within the Otago region.

iii. The mana of Käi Tahu ki Otago is upheld through the management of natural, physical and historic resources in the Otago Region.

iv. Käi Tahu ki Otago have effective participation in all resource management activities within the Otago Region.

v. The respective roles and responsibilities of Manawhenua within the Otago Region are recognised and provided for through the other objectives and policies of the Plan.

Chapter 10 sets out objectives and policies as they are relevant to the Clutha/Mata-au Catchment, within the Queenstown Lakes District Council area. There are provisions within the plan which relate specifically to hydro-electricity schemes and the identification of *Cultural Landscapes* which have the potential to be adversely affected by energy developments and infrastructure. The proposed objectives and policies of the Energy and Utilities chapter include provisions which seek to ensure that the potential for adverse effects on recreation and cultural values (including relationships with takata whenua) are avoided, remedied or mitigated (proposed policy 17.3.4.6). Chapter 17 will not offend any of the relevant objectives and policies.

Ngai Tahu Ki Murihiku Natural Resource and Environmental Iwi Management Plan (2008)

The Ngai Tahu Ki Murihiku Natural Resources and Environmental Iwi Management Plan (Murihiku Plan) was issued in 2008 and consolidates Ngai Tahuki Murihiku values, knowledge and perspectives on natural resources and environmental management issues. The Murihiku Plan identifies kaitiakitanga, environmental and social, economic, health and wellbeing outcomes that need to be recognised when preparing a district plan. Chapter 17 will not offend any of the relevant objectives and policies.

5. Section 32 Evaluation

All Districts must be evaluated as directed by section 32 of the RMA. Section 32(1) and (2) specifies what the evaluation must examine.

(1) An evaluation report required under this Act must—
- *(a) examine the extent to which the objectives of the proposal being evaluated are the most appropriate way to achieve the purpose of this Act; and*
- *(b) examine whether the provisions in the proposal are the most appropriate way to achieve the objectives by—*
  - *(i) identifying other reasonably practicable options for achieving the objectives; and*
  - *(ii) assessing the efficiency and effectiveness of the provisions in achieving the objectives; and*
  - *(iii) summarising the reasons for deciding on the provisions; and*

(c) contain a level of detail that corresponds to the scale and significance of the environmental, economic, social, and cultural effects that are anticipated from the implementation of the proposal.

(2) An assessment under subsection (1)(b)(ii) must—
(a) identify and assess the benefits and costs of the environmental, economic, social, and cultural effects that are anticipated from the implementation of the provisions, including the opportunities for—
(i) economic growth that are anticipated to be provided or reduced; and
(ii) employment that are anticipated to be provided or reduced; and
(b) if practicable, quantify the benefits and costs referred to in paragraph (a); and
(c) assess the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the provisions.

Section 32(3) relates to "amending proposals". As Council is preparing a new 'proposed' district plan, this section is not considered relevant.

6. Resource Management Issues

Part 2 of the Act details the purpose and principals which includes:

5 Purpose
(1) The purpose of this Act is to promote the sustainable management of natural and physical resources.
*(2) In this Act, **sustainable management** means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety while—*
(a) sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and
(b) safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and
(c) avoiding, remedying, or mitigating any adverse effects of activities on the environment.

The RMA defines "Natural and physical resources" as:

***natural and physical resources** includes land, water, air, soil, minerals, and energy, all forms of plants and animals (whether native to New Zealand or introduced), and all structures*

In order to give effect to this purpose the Government has issued a number of National Policy Statements including the NPS-REG and the NPSET which seek to enable sustainable management.

The NPS-REG confirms that:

- renewable electricity generation, regardless of scale, makes a crucial contribution to the well-being of New Zealand, its people and the environment, and any reductions in existing renewable energy generation will compromise the achievement of the Government's renewable electricity target of 90% of electricity from renewable sources by 2025; and
- the development, operation, maintenance and upgrading of new and existing renewable electricity generation activities throughout New Zealand, and the associated benefits of renewable electricity generation, are matters of national significance.

In light of this, the key messages emerging from the NSP_REG is that local authorities are required to adopt a positive and proactive policy response to renewable electricity generation activities in policy statements and plans that apply at national, regional and local levels.

The NPSET facilities the operation, maintenance, upgrading and development of the electricity transmission network and complements the NPS_REG. The NPSET seeks to ensure that, in

providing for the transmission of electricity within a district and in managing the effects of the transmission network on the environment, the operational and long-term development requirements of the network are appropriately considered and its status as a linear cross-boundary network is fully recognised. The Energy and Utilities Chapter seeks to give effect to these national policy statements in conjunction with providing for other local, regional and nationally critical infrastructure.

7. Purpose

The overarching purpose of the Energy and Utilities Chapter is to provide for the sustainable management and growth of local, regional and nationally critical infrastructure and energy development.

Combining Energy and Utilities into a single section recognises the close association between the development of energy resources, the generation of electricity and the provision of essential utilities throughout the District.

Chapter 17 will provide for existing and future Energy and Utilities activities to occur over the next planning period. The following sections of this report (Sections 8 to 13) have been provided in order to fulfil the statutory requirements of section 32 of the RMA.

8. Evaluation of proposed Objectives - Section 32 (1) (a)

Section 32(1)(a) of the RMA requires the evaluation to examine the extent that a new objective is the most appropriate way to achieve the purpose of the Act. Five (5) Energy objectives and three (3) Utilities objectives are proposed as part of Chapter 17. This section of the report considers the objectives in the context of the purpose of the Act.

As indicated in Section 5 of this report the purpose of the Act demands an integrated planning approach and direction.

The remaining provisions in Part 2 of the Act, including sections 6, 7 and 8 provide a framework within which objectives are required to achieve the purpose of the Act and provisions are required to achieve the relevant objectives. Section 7 (abbreviated below) is particularly relevant to Chapter 17:

> ***Section 7 Other Matters***
>
> *In achieving the purpose of this Act, all persons exercising functions and power under it, in relation to managing the use, development, and protecting of natural and physical resources, shall have particular regard to*
>
> *—*
>
> *(b) the efficient use and development of natural and physical resources:*
> *(c) the maintenance and enhancement of amenity values:*
> *(f) maintenance and enhancement of the quality of the environment:*

The extent to which the proposed objectives meet the overarching purpose of the Act is set out below.

The following objectives serve to address the Energy and Utilities issues identified in Section 6:

Proposed Objective	*Appropriateness*
Proposed Objective 17.3.1 **To ensure that 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.**	The proposed objective is considered to be the most appropriate way to achieve the purposes of the Act as it recognises the importance of energy to the development and functioning of society. The RMA definition of "natural and physical resources" includes energy and the objective seeks to sustain the potential of energy resources to meet the reasonably foreseeable needs of future generations [s5(a)]. In respect of matters under Section 7, the objective provides a framework that will ensure that the District Plan gives consideration to the effects of climate change [s7(i)] and that the benefits of the use and development of renewable energy [s7(j)] are recognised and provided for. The objective gives effect to the requirements of the NPS-REG. Gives effect to RPS objectives 5.4.1; 7.4.1; 9.4.1; 12.4.1 – 12.4.3 (inclusive). Gives effect to RPS policies: 5.5.1; 7.5.4; 7.5.5; 9.5.2; 12.5.1; 12.5.2 and 12.5.4. (Refer to **Attachment 1** for an assessment of Chapter 17 against these provisions).

Proposed Objective 17.3.2 **To recognise that the use and development of renewable energy resources have the following particular benefits:** **a. Maintains or enhances electricity generation capacity while avoiding, reducing or displacing greenhouse gas emissions;** **b. 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. Assists in meeting international climate change obligations; and** **d. Reduces reliance on imported fuels for the purpose of generating electricity.**	The proposed objective is considered to be the most appropriate way to achieve the purpose of the Act as it specifically recognises the benefits associated with the use and development of renewable energy resources. Renewable electricity generation, regardless of scale, contributes to the well-being of New Zealand and by recognising its national significance it will continue meeting the reasonably foreseeable needs of future generations. As identified above, the Government has set a target for 90% of the country's electricity to be generated from renewable resources by the year 2025. To achieve this, the NPS_REG has been put in place. The District Plan must give effect to this National Policy Statement. It is recognised that to achieve the target New Zealand will require significant development of renewable electricity generation activities along with the protection of output from existing activities. This is further reinforced by Section 7(j) of the Act which requires Council to have particular regard to the benefits derived from the use and development of renewable energy. The objective gives effect to the requirements of the NPS-REG. Gives effect to RPS objectives 5.4.1; 7.4.1; 9.4.1; 12.4.1 – 12.4.3 (inclusive). Gives effect to RPS policies: 5.5.1; 7.5.4; 7.5.5; 9.5.2; 12.5.1; 12.5.2 and 12.5.4.

Proposed Objective 17.3.3 **To enable new technologies using renewable energy resources to be investigated and established in the district.**	The proposed objective is considered to be the most appropriate way to achieve the purpose of the Act as it specifically provides for the investigation and research into new technologies utilising renewable technologies. The objective seeks to enable research into alternative renewable energy technologies which can assist in sustaining the potential of natural and physical resources to meet the reasonably foreseeable needs of future generations [s5(a)]. The objective will also enable investigations into technologies which will result in efficiency in the end use of energy [s7(ba)]; enable a better understanding of the finite characteristics of natural and physical resources [s7(g) and renewable electricity generation on climate change [s7(i)] to be obtained and ultimately to evaluate the benefits to be derived from the use and development of new renewable energy technologies [s7(j)]. The objective gives effect to the requirements of the NPS-REG. Gives effect to RPS objectives 5.4.1; 7.4.1; 9.4.1; 12.4.1 – 12.4.3 (inclusive). Gives effect to RPS policies: 5.5.1; 7.5.4; 7.5.5; 9.5.2; 12.5.1; 12.5.2 and 12.5.4.

Proposed Objective 17.3.4 **Energy resources are developed and electricity is generated, in a manner that minimises adverse effects on the environment.**	Objective 17.3.4 seeks to manage the adverse effects of the development of energy resources and electricity generation at any scale to maintain and enhance amenity values, the intrinsic value of ecosystems and quality of the environment. This objective is the most appropriate way to achieve the purpose of the Act as it encourages energy development that minimises environmental effects, while recognising the importance of energy resources. Energy use is essential to the regional and national economy and supports community, social and economic wellbeing. Using energy efficiently and developing utilities sustainably can maintain resource potential for future generations (s5(2)(a), minimise effects on life supporting capacity of resources (e.g. air and water) [s 5(2)(b)] and avoid or mitigate environmental effects associated with the resource use and development [s 5(2) (c)]. In respect of matters under Sections 6 and 7, the objective provides a framework that will ensure that energy resources are managed and used efficiently [s 7(b)] and effects on the environment from the development of renewable energy resources, including effects on natural features and landscapes [s6(a)] ecosystems [s 7(d)] and the quality of the environment [s7(f)] are minimised. Consistent with Goals 1, 4 and 5 of the Draft Strategic Directions Chapter. Gives effect to RPS objectives 5.4.1; 5.4.2; 5.4.3; 6.4.2; 6.4.3 7.4.1; 9.4.1; 9.4.3; 12.4.1 – 12.4.3 (inclusive). Gives effect to RPS policies: 5.5.1; 5.5.3; 5.5.5; 7.5.4; 7.5.5; 9.5.2; 12.5.1 - 12.5.4.

Proposed Objective 17.3.5 **Building design and development takes into consideration energy efficiency and conservation.**	This objective is the most appropriate way to achieve the purpose of the Act as it encourages energy efficiency measures in subdivision, development and use. Using energy efficiently and sustainably can maintain resource potential for future generations (s5(2)(a), minimise effects on life supporting capacity of resources (e.g. air and water) [s5(2)(b)] and avoid or mitigate environmental effects associated with the resource use and development [s 5(2) (c)]. The objective is the most appropriate means of achieving section 7 (b) and (ba). Introducing energy conservation enables the efficient use of the land resource and enables a greater understanding of the efficiency of the end use of energy. Consistent with Goals 1, 3, 4 and 6 of the Draft Strategic Directions Chapter. Gives effect to RPS objectives 7.4.1; 9.4.1; 12.4.1 – 12.4.3 (inclusive); 13.4.2 and 13.4.3. Gives effect to RPS policies: 7.5.4; 7.5.5; 9.5.2; 9.5.3; 12.5.2; 12.5.3 and 12.5.4.
Proposed Objective 17.3.6 **Co-ordinate the provision of utilities with the development of the District.**	This objective is the most appropriate way to achieve the purpose of the Act as it encourages a co-ordinated approach between the development of the District and the provision of utilities and services. This is necessary to ensure areas are capable of being serviced and that the timing of services facilitates development of an area. Using and developing utilities sustainably can maintain resource potential for future generations (s5(2)(a), minimise effects on life supporting capacity of resources (e.g. air and water) [s 5(2)(b)] and avoid or mitigate environmental effects associated with the resource use and development [s 5(2) (c)]. Consistent with Goals 1, 4 and 5 of the Draft Strategic Directions Chapter. Gives effect to RPS objectives 5.4.1; 5.4.2; 5.4.3; 6.4.2; 6.4.3 7.4.1; 9.4.1; 9.4.3; 12.4.1 – 12.4.3 (inclusive).

Proposed Objective 17.3.7 **The establishment, efficient use and maintenance of utilities necessary for the well-being of the community.**	This objective is the most appropriate way to achieve the purpose of the Act as it recognises the important role of utilities in providing essential services to the community and the need for the establishment and on-going functioning, maintenance and upgrading of utilities. Using and developing utilities sustainably can maintain resource potential for future generations (s5(2)(a), minimise effects on life supporting capacity of resources (e.g. air and water) [s 5(2)(b)] and avoid or mitigate environmental effects associated with the resource use and development [s 5(2) (c)]. In respect of matters under Sections 6 and 7, the objective is the most appropriate way to meet the purpose of the Act in that it provides a framework which will promote the efficient use of natural and physical resources [s7(b)] efficiency in the end use of energy [s7(ba)] and effects on the environment from the establishment, efficient use and maintenance of utilities, including the quality of the environment [s7(f)] are minimised. Consistent with Goals 1, 4 and 5 of the Draft Strategic Directions Chapter. Gives effect to RPS objectives 5.4.1; 5.4.2; 5.4.3; 6.4.2; 6.4.3 7.4.1; 9.4.1; 9.4.3; 12.4.1 – 12.4.3 (inclusive).
Proposed Objective 17.3.8 **Avoid remedy or mitigate the adverse effects of utilities on the surrounding environments, particularly those in or on land of high landscape value, and within special character areas.**	In terms of addressing potential adverse effects of utilities activities, the proposed objective is considered to be the most appropriate to meet the purpose of the Act. The objective focuses on managing potential effects of utilities on the surrounding environments in general and those areas of the District in areas of high landscape value or special character. An objective that requires the management of adverse effects is consistent with s5(2)(c). In respect of matters under Sections 6 and 7, the objective is the most appropriate to meet the purpose of the Act in that it provides a framework which will ensure that utilities activities are managed and used efficiently [s 7(b)] and effects on the environment from the development of utilities, including effects on natural features and landscapes s6(a); ecosystems [s 7(d)] and the quality of the environment [s7(f)] are minimised. Consistent with Goals 1, 4 and 5 of the Draft Strategic Directions Chapter. Gives effect to RPS objectives 5.4.1; 5.4.2; 5.4.3; 6.4.2; 6.4.3 7.4.1; 9.4.1; 9.4.3; 12.4.1 – 12.4.3 (inclusive).

The above objectives have been considered against Part 2 of the Act, the RPS, and the draft Strategic Directions chapter of the proposed plan. The proposed objectives are considered the most appropriate method of achieving the purpose of the Act, as they identify and give direction as to the how the specific issues that pertain to Energy and Utilities are to be addressed.

9. Evaluation of broad options for achieving Objectives Section 32 (1) (b)(i)

As required by section 32(1)(b)(i) RMA, the following section considers the reasonably practicable options for achieving the proposed objectives. This assessment is carried out in relation to the proposed provisions of Chapter 17, which includes the proposed policies and rules relating to Energy and Utilities.

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Broad options considered for achieving the objectives (Section 32(1)(b)(i))

Proposed Objective 17.3.1 - To ensure that 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.

Proposed Objective 17.3.2 - To recognise that the use and development of renewable energy resources have the following particular benefits:

e. Maintains or enhances electricity generation capacity while avoiding, reducing or displacing greenhouse gas emissions;
f. Maintains or enhances the security of electricity supply at local, regional and national levels by diversifying the type and/or location of electricity generation;
g. Assists in meeting international climate change obligations; and
h. Reduces reliance on imported fuels for the purpose of generating electricity.

Proposed Objective 17.3.3 - To enable new technologies using renewable energy resources to be investigated and established in the district.

Proposed Objective 17.3.4 - Energy resources are developed and electricity is generated, in a manner that minimises adverse effects on the environment.

Option 1: Retain the provisions of the operative District Plan.

Option 2: Retain and improve the operative provisions within each zone.

Option 3: Comprehensive review of the objectives, policies and rules and provisions relating to renewable electricity generation.

	Option 1: **Status quo/ No change**	**Option 2:** **Retain and Improve Existing Provisions**	**Option 3:** **Comprehensive review of Provisions and structure of District Plan**
Cons	• As a 'first generation' District Plan the broad energy provisions do not sufficiently address the directions contained in the NPS-REG. The existing framework does not recognise Small and Community scale renewable electricity generation and	• Has costs associated with going through the District Plan Review process (but this is required by legislation). • Retaining provisions throughout each zone in the plan is more complex and difficult to administer. To address the requirements of the NPS-REG, this	• A comprehensive review will result in the addition of a new chapter to the District Plan (and associated cost). • Financial costs associated with going through the District Plan Review process (but this is required by legislation).

	the rules result in unnecessary resource consent assessments. • Uncertainty and delays for third parties requiring consent for renewable electricity generation activities.	approach would result in considerable duplication.	
Pros	• Retains the established approach which parties are familiar with. • Low cost for Council.	• Retains but improves the approach parties are familiar with.	• A comprehensive review provides for a targeted response to the directions contained in the NPS-REG. NPS-REG requires Councils to adopt a positive and proactive policy response to renewable electricity generation activities.
Summary	Based on the above assessment, Option 3 is considered the most appropriate option for achieving the Energy objectives of the proposed plan.		

Proposed Objective 17.3.5 Building design and development takes into consideration energy efficiency and conservation.

Option 1: Retain the provisions of the Operative District Plan.

Option 2: Retain and improve the operative provisions within each zone.

Option 3: Comprehensive review of the objectives, policies and rules and provisions relating to Energy and Utilities.

	Option 1: **Status quo/ No change**	**Option 2:** **Retain and Improve Existing Provisions**	**Option 3:** **Comprehensive Review of Provisions and Structure of District Plan**
Cons	• Does not provide the opportunity to update the Energy provisions. • Energy and energy efficiency are currently considered under the District Wide Issues in section 4.5 of the District Plan which does not adequately recognise or provide for the requirements of the NPS-REG.	• Has costs associated with going through the District Plan Review process (but this is required by legislation). • Would result in a change from the status quo – Plan users would need to become familiar with new provisions.	• Has costs associated with going through the District Plan Review process (but this is required by legislation). • Would result in a change from the status quo – Plan users would need to become familiar with new provisions.
Pros	• Maintains the established approach which parties are familiar with. • Low cost for Council. • Some provisions of the District Plan are working well.	• Some provisions of the District Plan are working well, but could be improved with further minor amendments.	• Prevents duplication of issues and improves administration of the plan. • Addresses the requirements of NPS-REG in a comprehensive way and provides for a focused approach to energy efficiency and conservation.
Summary	Based on the above assessment, Option 3 is considered the most appropriate option for achieving the Energy Efficiency objective of the proposed plan.		

Proposed Objective 17.3.6 - Co-ordinate the provision of utilities with the development of the District.

Proposed Objective 17.3.7 - The establishment, efficient use and maintenance of utilities necessary for the well-being of the community.

Proposed Objective 17.3.8 - Avoid remedy or mitigate the adverse effects of utilities on the surrounding environments, particularly those in or on land of high landscape value, and within special character areas.

Option 1: Retain the provisions of the Operative District Plan.

Option 2: Retain and improve the operative provisions within each zone.

Option 3: Comprehensive review of structure of District Plan and amend and improve provisions to align with updated legislation and a need to simplify the Plan.

	Option 1: **Status quo/ No change**	**Option 2:** **Retain and Improve Existing Provisions**	**Option 3:** **Comprehensive Review of Structure of District Plan and Amend and Improve Provisions**
Cons	• Would retain the current provisions (objectives, policies and rules) as they stand. This will allow for the familiarity of users to remain but would not address the deficiencies identified through monitoring and would not address current anomalies in the District Plan.	• Has costs associated with going through the District Plan Review process (but this is required by legislation). • Would result in a change from the status quo – Plan users would need to become familiar with new provisions. • This would address minor issues within the provisions but does not significantly improve the clarity and continuity of the chapter. As such it fails to simplify and streamline.	• Has costs associated with going through the District Plan Review process (but this is required by legislation). • Would result in a change from the status quo – Plan users would need to become familiar with new provisions.

Pros	• Maintains the established approach which parties are familiar with. • Low cost for Council. • Some provisions of the operative District Plan are working well.	• As identified in the Section 17: Utilities Monitoring Report 2011 some provisions of the District Plan are working well, but could be improved with further minor amendments. • Retains established approach but introduces amendments where necessary to improve clarity and assist implementation.	• Requires the provision to be examined in light of the current needs of the District, with updated legislation and a need to simplify the District Plan as part of a wider staged Review. The resultant provisions would not be any less effective than Option 2 but readability and relevancy would be greatly improved. • This option allows clearer links between objectives, policies and rules, and alignment with the Strategic Directions chapter.
Summary	Based on the above assessment, Option 3 is considered the most appropriate option for achieving the Utilities objectives of the proposed plan.		

10. Scale and Significance Evaluation – Section 32(1)(c)

The level of detailed analysis undertaken for the evaluation of the proposed objectives and provisions has been determined by an assessment of the scale and significance of the implementation of the proposed provisions relating to Energy and Utilities. In making this assessment, regard has been had to the following, namely whether the objectives and provisions:

- Result in a significant variance from the existing baseline (Section 32(3)).
- Have effects on matters of national importance.
- Adversely affect those with specific interests, e.g., Tangata Whenua.
- Involve effects that have been considered implicitly or explicitly by higher order documents.
- Impose increased costs or restrictions on individuals, communities or businesses.

11. Evaluation of the proposed provisions Section 32 (1)(b)(ii)

Under section 32 (2)(a) an assessment under section 32(1)(b)(ii) must identify and assess the benefits and costs of the environmental, economic, social, and cultural effects that are anticipated from the implementation of the provisions, including the opportunities for —

(i) economic growth that are anticipated to be provided or reduced; and
(ii) employment that are anticipated to be provided or reduced (section 32(2)(a)).

In relation to Chapter 17, the implementation of the proposed provisions may result in opportunities for economic growth and employment opportunities due to the enabling nature of the provisions relating to renewable electricity generation. In addition, the costs associated with implementation of the NPSET may result in costs due to restrictions on the use of land. It is not considered practicable to quantify the costs and benefits associated with the additional economic growth or employment opportunities that may arise.

The necessary assessment of the proposed policies, rules and other methods under sections 32(1)(b)(ii) and (2)(a), is provided below. The policies, rules and other methods that are specific to Energy and Utilities have been assessed for their appropriateness in achieving the proposed objectives and the overarching Strategic Directions chapter of the proposed plan.

Many of the proposed policies and rules relating to Energy outlined in this section are new to the District Plan. Many of the Utilities policies and rules do not significantly depart from those of the Operative District Plan with the exception were amendments are required to comply with National Environmental Standards and National Policy Statements.

(See also Table detailing broad options considered in Section 6, above)

Proposed Objective 17.3.1 - To ensure that 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.

Proposed Objective 17.3.2 - To recognise that the use and development of renewable energy resources have the following particular benefits:

a. **Maintains or enhances electricity generation capacity while avoiding, reducing or displacing greenhouse gas emissions;**
b. **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. **Assists in meeting international climate change obligations; and**
d. **Reduces reliance on imported fuels for the purpose of generating electricity.**

Proposed Objective 17.3.3 - To enable new technologies using renewable energy resources to be investigated and established in the district.

Proposed Objective 17.3.4 - Energy resources are developed and electricity is generated, in a manner that minimises adverse effects on the environment.

(Strategic Directions Chapter – Proposed Objectives) - Objective 3.2.1.3; Objective 3.2.4.8; Objective 3.2.4.1; Objective 3.2.4.2; Objective 3.2.4.5; Objective 3.2.4.6 and Objective 3.2.5.1.

Summary of proposed provisions that give effect to these objectives:

- Enabling provisions which promote the use of small and community scale distributed electricity generation and solar water heating subject to compliance with performance standards
- Introduce performance standards to address potential effects associated with various forms of renewable electricity generation.
- Promotion of solar installations on buildings
- Discretionary activity status for renewable electricity generation activities in sensitive areas.
- New set of rules which take precedence over rules in each zone.
- Identifies those provisions in the District Plan which will not over-ride the Energy and Utilities Chapter.
- To provide for associated buildings to be permitted in the underlying zone up to $10m^2$ in area.
- Non-complying status for power generation from non-renewable sources – exemptions are provided for standby generators and Stand Alone Power systems.

Proposed provisions	***Environmental, Economic, Social and Cultural Costs***	***Environmental, Economic, Social and Cultural Benefits***	***Effectiveness, Efficiency & Appropriateness***
Energy Policies: Recognising the Benefits ***Proposed Policy 17.3.3.1*** *Recognise the national, regional and local benefits of the District's renewable and non-renewable electricity generation activities when considering resource consent applications for their development, operation, maintenance and upgrading.* ***Proposed Policy 17.3.3.2*** *To enable the operation, maintenance, repowering, upgrade and development of existing non-renewable electricity generation activities where adverse effects can be avoided, remedied or mitigated.* ***Proposed Policy 17.3.3.3*** *Recognise and provide for the development, operation, maintenance, repowering and upgrading of new and existing renewable electricity generation activities, (including small and community scale), in a matter 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 developing, upgrading, operating and maintaining renewable electricity generation activities.* ***c.** Encourages, facilitates and provides for research and exploratory-scale investigations into existing and emerging renewable electricity generation technologies and methods.* ***Energy Rules:*** ***Proposed Rule 17.4.2.1***	Costs to Council to develop plan provisions, implement plan updates and administer plan and approvals processes.	Can help to enable economic growth through energy development in appropriate locations where it can be developed without resulting in adverse effects on the environment. The policies recognise the benefits of renewable energy and the importance of developing renewable energy sources to meet the NPS-REG targets for renewable electricity generation. Rule 17.4.2.1 will enable small generation to occur without the need for resource consent and associated costs. By reducing regulation around the installation process it is aimed to remove impediments and increase local uptake of renewable technologies. If a consent process is triggered the extent of assessment is limited – this should ensure that the process is not unduly onerous. Social, cultural and environmental benefits resulting from reducing the effects on the environment of	These policies are the most appropriate to achieve the objectives as they seek a balance between the benefits of developing energy resources and electricity generation and the adverse effects and constraints associated with their development. The plan seeks to enable these activities subject to compliance with site standards to mitigate their potential adverse effects. Use of site standards is considered the most efficient and effective mechanism. The policies and rules are effective in terms of providing consistency with the NPS-REG. The policies and rules are considered to be the most appropriate way to achieve the objective.

Proposed provisions	***Environmental, Economic, Social and Cultural Costs***	***Environmental, Economic, Social and Cultural Benefits***	***Effectiveness, Efficiency & Appropriateness***
Small and Community-Scale Distributed Electricity Generation and Solar Water Heating (including any structures and associated buildings) is a permitted activity where it is not listed as a Non-Complying Activity, Discretionary Activity, Restricted Discretionary Activity and complies with all of the Standards within Rule 17.5 - Table 17.2. ***Proposed Rule 17.4.2.2*** *Small and Community-Scale Distributed Electricity Generation and Solar Water Heating that is not listed as a Non-Complying Activity or Discretionary Activity and that does not comply with one or more of the Standards within Rule 17.5 - Table 17.2 shall be a Restricted Discretionary Activity.*		non-renewable sources and better providing for the health and well-being of the environment and community. Reduces community reliance on non-renewable sources of energy and helps to realise the associated social and environmental benefits.	

Proposed provisions	***Environmental, Economic, Social and Cultural Costs***	***Environmental, Economic, Social and Cultural Benefits***	***Effectiveness, Efficiency & Appropriateness***
<u>Potential Effects</u> ***Proposed Policy 17.3.4.1*** *To promote free-standing Small and Community-Scale Distributed Electricity Generation structures and associated buildings where their effects on amenity values can be remedied or mitigated.* ***Proposed Policy 17.3.4.2*** *To ensure the visual effects of Wind Electricity Generation do not exceed the capacity of an area to absorb change or detract from landscape and visual amenity values.* ***Proposed Policy 17.3.4.3*** *To promote Biomass Electricity Generation in proximity to available fuels sources that minimise external effects on the surrounding road network and the amenity values of neighbours.* ***Proposed Policy 17.3.4.4*** *To assess the adverse effects of renewable electricity generation, other than Small and Community Scale, on a case-by-case basis, to ensure those activities:* *(a) Avoid, remedy or mitigate any significant adverse effects on landscape values and areas with significant indigenous flora or fauna.* *(b) Avoid, remedy or mitigate adverse effects on recreation and cultural values, including relationships with takata whenua.* ***Proposed Policy 17.3.4.5*** *To protect existing energy facilities, associated infrastructure and undeveloped energy resources from reverse sensitivity effects of incompatible subdivision, land use and development.*	Costs to Council to develop plan provisions, implement plan updates and administer plan and approvals processes.	Greater likelihood of avoiding or mitigating environmental effects from small scale generation activities. Greater security of supply through local and developed generation activities. Improved transmission efficiency and reduced costs by reducing the distance between generation and users. Promotes greater community energy independence and resilience to costs and interrupted supply from events such as natural disasters. This has clear benefits to community social and economic wellbeing.	The combination of energy policies and rules will result in an efficient and effective regulatory and management framework. This framework will provide for the development of energy resources whilst minimising adverse environmental effects and promote renewable electricity generation. The policies are efficient and effective in that they recognise that small and community scale renewable electricity generation can be mitigated and carried out with minimal adverse effects on the environment. Larger scale generation requires assessment to ensure significant adverse effects on landscape values and areas of significant indigenous flora and fauna are avoided. This is considered appropriate. These policies are considered the most appropriate way to achieve the objectives.

Proposed provisions	***Environmental, Economic, Social and Cultural Costs***	***Environmental, Economic, Social and Cultural Benefits***	***Effectiveness, Efficiency & Appropriateness***
Proposed Policy 17.3.4.6 *Where the adverse effects of energy generation activities cannot be practically avoided, remedied or mitigated, consideration shall be given, in determining a resource consent application and imposing resource conditions, to any offset measures and/or environmental compensation including measures or compensation which benefit the local environment and community affected.*			
Non-Renewable Sources ***Proposed Policy 17.3.4.7*** *To provide for investigation into and development and operation of non-renewable energy resources including standby power generation and Stand Alone Power systems where adverse effects can be mitigated.* ***Proposed Rule 17.4.2.4*** *Power generation from non-renewable sources, except where the generation only supplies activities on the site on which it is located and involves either:* *(a) Standby generators associated with community, health care, and utility activities; or* *(b) Generators that are part of a Stand-Alone Power System on remote sites that do not have connection to the local distributed electricity network.*	The environmental costs of generating electricity from non-renewable sources are very high and for this reason the plan seeks to discourage this type of generation through the adoption of non-complying activity status.	These policies provide a framework for consideration of non-renewable energy resource development within the District. The policies enable the Council to consider how non-renewable electricity generation might be provided in areas with minimal effects. Provides for standby power generators as a means of providing essential public, civic and health and community services. The policy framework and rule 17.4.2.4 provide for non-renewable stand-by generators. These provide back-up for essential services and form a necessary part of SAPs in remote locations. The benefits of standby	These provisions are considered to be neutral in terms of efficiency. These provisions are effective in terms of providing a District wide framework for non-renewable electricity generation. A non-complying activity status is an effective way of ensuring that new proposals for non-renewable electricity generation are rigorously assessed to ensure that potential adverse effects are minimised. These provisions are considered to be the most appropriate way to achieve the objectives.

Proposed provisions	***Environmental, Economic, Social and Cultural Costs***	***Environmental, Economic, Social and Cultural Benefits***	***Effectiveness, Efficiency & Appropriateness***
		generators outweigh the environmental costs of use of non-renewable fuel.	
Proposed Rule 17.4.2.3 i Sensitive Environments *Small and Community-Scale Distributed Electricity Generation and Solar Water Heating in any of the following areas:* *(a) Residential Arrowtown Historic Management Zone* *(b) Town Centre Special Character Areas* *(c) Open Space Zones (Part 20)* *(d) Any open space and landscape buffer areas identified on any of the Special zone structure plans (Part 12)* *(e) Sites of significant indigenous vegetation*	This rule may result in additional compliance costs arising. However, any compliance costs are considered acceptable when balanced with the potential for adverse effects from small and community scale distributed electricity generation in sensitive areas.	These sensitive environments are identified in the plan as having special values and qualities. The benefits arising from this rule will be to ensure that small and community scale distributed electricity generation do not result in adverse effects on the sensitive environments. The discretionary activity rule provides for a case-by-case assessment ensuring that adverse effects can be avoided.	The proposed rule will result in the efficient management of small and community scale distributed electricity generation activities in sensitive environments. The environments are sensitive to change and a discretionary assessment is considered the most effective way of avoiding potential adverse effects without compromising the value of the natural and physical resource at stake. The rule is considered the most appropriate way to achieve the objectives.
Proposed Rule 17.4.2.3 ii Rural General Zone *(a) Any new or additional building housing plant and electrical equipment associated with Renewable Electricity Generation activities located within the Rural General Zone.* *(b) Structures associated with Renewable Electricity Generation activities, other than Solar Electricity*	Resource consent process costs and uncertainty of obtaining approval may be a deterrent to prospective renewable electricity generation.	Case-by-case assessment in the Rural General Zone will ensure that landscape and visual effects are avoided, remedied or mitigated. By permitting *solar structures* that form part of, or are	This rule is neutral in terms of efficiency. This rule is effective as it provides clarity in terms of the nature and type of renewable electricity that can occur in the Rural General Zone.

Proposed provisions	***Environmental, Economic, Social and Cultural Costs***	***Environmental, Economic, Social and Cultural Benefits***	***Effectiveness, Efficiency & Appropriateness***
Generation and Solar Water Heating structures that form part of, or are attached to a building, located within the Rural General Zone.		attached to a building the goal is to reduce impediments to the uptake of this technology in locations that are capable of absorbing change.	The rule is considered the most appropriate way to achieve the objectives.
Proposed Rule 17.4.2.3 iii Renewable Electricity Generation Activities*, other than Small and Community-Scale Distributed Electricity Generation.*	Resource consent costs and uncertainty of obtaining approval may be a deterrent to prospective renewable electricity generation.	A case-by-case assessment will ensure that amenity and highly valued landscape values are not adversely impacted.	This rule triggers a discretionary assessment for renewable electricity generation, other than small and community scale. “Medium to large scale" renewable electricity generation activities have the potential to generate a wide range of adverse effects. Within the diverse range of environments within the District a case-by-case assessment of these effects is considered the most efficient and effective method. The rule is considered the most appropriate way to achieve the objectives.
Proposed Rule 17.6.1 Non-notification of applications ***i Stand-alone Power Systems (SAP’s)*** ***ii Controlled Activities***	Neighbours may still consider themselves affected by even small SAP’ or Utilities.	SAP’s provide an alternative to distributed power and where practicable are the preferred option to over-head line's running into remote areas with associated visual and landscape effects.	This rule is considered effective as SAP’s by definition relate to remote sites that do not have connection to the local distribution network. Installations on these remote sites are unlikely to impact on neighbours. It is considered efficient to limit the resource

Proposed provisions	***Environmental, Economic, Social and Cultural Costs***	***Environmental, Economic, Social and Cultural Benefits***	***Effectiveness, Efficiency & Appropriateness***
		By specifying non-notification for SAP's and controlled activities it is aimed to reduce the complexity of the resource consent process to non-notified. This creates economic efficiencies through the avoidance of consent delays. All activities which cannot achieve the permitted activity requirements default to a fully discretionary activity, therefore decision makers have the ability to decline consent should the effects be considered too great.	consent process to non-notified. This provision is considered effective as it provides certainty around notification, however does not preclude the decision makers consideration of effects on other parties. The rule is efficient in that it removes potential delays in the consenting process. The rule is considered the most appropriate way to achieve the objectives.
Energy Standards ***Proposed Rule 17.5.1 i*** ***i Solar Electricity Generation and Solar Water Heating*** *(a) Solar Electricity Generation and Solar Water Heating structures shall be contained within the building footprint or roof and shall not overhang the edge of any building.* *(b) 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. Recessive colours shall be selected to be the closest colour to*	In zones where external appearance of buildings is assessed this rule may result in different materials being used. The benefits of enabling renewable electricity generation outweigh these potential adverse visual effects. The imposition of bulk and location standards in the zone in which Solar is located may result in resource consent and associated costs.	By treating all the components of Solar equally it simplifies the provisions and makes them easier to understand. This rule enables roof top spaces to be utilised for solar installations. While installations must be contained within the building envelope they are not limited in area, enabling maximum use of good north facing	The rule is considered to be efficient and effective as it seeks to provide for all of the components of solar energy activities in a single standard. The rule is considered the most appropriate way to achieve the objectives.

Proposed provisions	***Environmental, Economic, Social and Cultural Costs***	***Environmental, Economic, Social and Cultural Benefits***	***Effectiveness, Efficiency & Appropriateness***
the building to which they form part of, are attached to, or service. *(c) Solar Electricity Generation and Solar Water Heating structures shall be setback in accordance with the internal and road boundary setbacks for buildings in the zone in which they arelocated. Exemptions for accessory buildings shall not apply.* *(d) Solar Electricity Generation and Solar Water Heating Structures shall not exceed the maximum height or intrude through any recession planes applicable in the zone in which they are located.* *(e) Free standing Solar Electricity Generation and Solar Water Heating structures shall not exceed 2.5 metres in height.* *(f) Free standing Solar Electricity Generation and Solar Water Heating structures shall not exceed 150 m2 in area. Refer solar interpretative diagrams* *Due to the similar appearance and effect of Solar Water Heating collector panels to Solar PV this activity, while not generation, has been grouped in this chapter with Solar Electricity Generation.*		buildings. A threshold of 150m^2 for free standing structures enables sufficient area for a typical dwelling to be serviced, while only triggering resource consent assessment where larger scale has potential for visual and landscape effects.	
Energy Standard ***Proposed Rule 17.5.2 ii*** ***Mini and Micro Hydro Electricity Generation*** *(a) Mini and Micro Hydro Electricity Generation structures shall comply with Road and Internal Boundary Building Setbacks in the zone in which they are located.* *(b) Mini and Micro Hydro Electricity Generation structures shall not exceed 2.5 metres in height.* *(c) Mini and Micro Hydro Electricity Generation structures shall be finished in recessive colours consistent with the building it is servicing on site.* *Note: Reference should also be made to the Otago*	If consent is required by both the District Council and Regional Council it can add considerable time and cost to installing these types of installations.	Mini and micro hydro installations have limited land-use effects and by reducing regulation around the installation process it is aimed to remove impediments and increase local uptake of renewable technologies.	The proposed standard is considered to be efficient in that it seeks to provide for mini and macro hydro electricity generation and gives effect to the Otago Regional Water Plan in relation to this issue. In addition the standard is considered to be effective in terms of the requirements of the National Policy Statement for Freshwater Management 2011

Proposed provisions	***Environmental, Economic, Social and Cultural Costs***	***Environmental, Economic, Social and Cultural Benefits***	***Effectiveness, Efficiency & Appropriateness***
Regional Council Water Plan Rules.			which specifically acknowledges *Additional National Values* which include economic/commercial development including hydro-electric power generation. The standard is considered the most appropriate way to achieve the objectives.
Energy Standard ***Proposed Rule 17.5.3 iii*** ***Wind Electricity Generation*** *Note - the definition of Wind Electricity Generation includes masts for wind monitoring.*	Imposing a maximum height in accordance with buildings in the zone in which the installation is located will in many cases not provide sufficient flexibility for generation purposes and is likely to trigger resource consent and associated costs. Resource consent process and associated costs for small installations and monitoring masts. Neighbours may perceive nuisance effects from any wind installation.	In residential zones the potential for nuisance effects on neighbours is minimised though the exercise of discretion over design, visual effects and installation standards.	This rule is considered to be neutral in terms of efficiency. This rule is effective in terms of providing for wind electricity generation in the various zones without adversely impacting on amenity values. The standard is considered the most appropriate way to achieve the objectives.
Energy Standard ***Proposed Rule 17.5.4 iv*** ***Biomass Electricity Generation*** *(a) Biomass Electricity Generation fuel material shall be sourced on the same site as the generation plant, except: (i) Industrial Zones (and Industrial Activities Areas within Structure Plans).* *(b) Any outdoor storage of Biomass Electricity*	The costs of transporting fuel can be high. If consent is required by both the District Council and Regional Council it can add considerable time and cost to installing these types of installations.	Waste products can be put to good use through these technologies, which continue to be developed and improved	The proposed rule is considered efficient and effective as it targets the potential effects of biomass electricity generation and places control over the storage of materials and traffic effects.

Proposed provisions	***Environmental, Economic, Social and Cultural Costs***	***Environmental, Economic, Social and Cultural Benefits***	***Effectiveness, Efficiency & Appropriateness***
Generation fuel material shall be screened from adjoining sites and public places. *(c) Biomass Electricity Generation plant and equipment shall be located inside a Building.* *Note: Reference should also be made to the Otago Regional Council Air Plan Rules.*			The standard is considered the most appropriate way to achieve the objectives.
Energy Standard ***Proposed Rule 17.5.5 v*** ***Associated buildings*** *Note – a discretionary activity standard has been included for the Rural General Zone (refer 17.4.2.3 (ii))*	Where an existing building on site is not able to be utilised, 10m^2 may not provide sufficient area for the development of an accessory building and resource consent with associated costs may be triggered.	A threshold of 10m2 / 2.5m in height provides flexibility for a small associated building and removes a potential impediment to installations in locations where buildings require resource consent.	This rule is considered to be neutral in terms of efficiency. This rule is effective in terms of providing for small scale buildings associated with renewable electricity generation without adversely impacting on amenity values. The standard is considered the most appropriate way to achieve the objectives.
Proposed New Definitions: • *Biomass Electricity Generation;* • *Mini & Micro Hydro Electricity Generation;* • *Photovoltaics;* • *Renewable Energy;* • *Renewable Electricity Generation;* • *Renewable Electricity Generation Activities;* • *Small and Community Scale Distributed Electricity Generation;* • *Solar Electricity Generation;* • *Solar Water Heating* • *Stand-Alone Power Systems (SAPs);*	With renewable electricity generation technologies changing and evolving overtime the definitions have the potential to become out-dated, with associated administrated costs.	The new definitions are considered necessary to ensure consistent interpretation of the proposed objectives, policies and rules.	The definitions of "*Renewable Electricity Generation*", "*Renewable Electricity Generation Activities*" and "*Small and Community Scale Distributed Electricity Generation*" have been based on the NPS-REG. The new definitions are considered to be efficient and effective in terms of the administration of the District

Proposed provisions	***Environmental, Economic, Social and Cultural Costs***	***Environmental, Economic, Social and Cultural Benefits***	***Effectiveness, Efficiency & Appropriateness***
• *Wind electricity Generation.*			Plan. The definitions are considered to be the most appropriate way to achieve the objectives.
Proposed Rule 17.2.1 - General Provision *This rule specifies that the rules take precedence over any other provisions that would capture these activities. Unless specifically stated to the contrary.*	No costs have been identified associated with this rule.	This enables specific rules for renewable electricity generation activities to be included in a stand-alone chapter, making it easier for people to access and simpler to administer. It also reduces the inefficiency of duplicating provisions for renewable electricity generation across each zone.	This rule provides the mechanism for the chapter to be stand-alone which has been demonstrated to be efficient and effective in the first generation plan. This rule is considered to be the most appropriate way to achieve the objectives.

<u>Proposed Objective 17.3.5 -</u> Building design and development takes into consideration energy efficiency and conservation.

(Strategic Directions Chapter – Proposed Objectives) - Objective 3.2.2.1; Objective 3.2.3.1 and Objective 3.2.4.8.

Summary of proposed provisions that give effect to these objectives:

- Introducing a more focused objective relating to energy efficiency derived from the existing Energy objectives in the District Wide Provisions of the District Plan.
- Enabling provisions which promote energy efficiency in design in zone provisions.

Proposed provisions	***Environmental, Economic, Social and Cultural Costs***	***Environmental, Economic, Social and Cultural Benefits***	***Effectiveness, Efficiency & Appropriateness***

Energy Policies: ***Proposed Policy 17.3.5.1*** *Encourage energy efficiency and conservation practices, including use of energy efficient materials and renewable energy in development.* ***Proposed Policy 17.3.5.2*** *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.* ***Proposed Policy 17.3.5.3*** *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.* ***Proposed Policy 17.3.5.4*** *To control the location of buildings and outdoor living areas to reduce impediments to access to sunlight.*	Cost of maintaining a regulatory regime.	Promotion of energy efficiency will result in good urban design, in particular connectivity, which is a recurrent theme within the Strategic Directions Chapter. A more efficient liveable and attractive residential environment can improve the health and wellbeing of residents and the wider community. Good urban design and site development can significantly reduce costs related to energy resources. The Council's main area of influence with respect to energy conservation relates to the location and design of land-use activities, subdivisions and buildings. The location of land-use activities relative to one another can be a significant determinant in the length and number of vehicle trips undertaken. Therefore the implementation methods for these policies will be specific provisions within the various zones throughout the District seeking to control site sizes for residential units, shading of adjoining properties and orientation of outdoor living areas.	The proposed provisions enable energy efficiency principles to be promoted resulting in a high quality sustainable urban environment to be achieved. This is considered to be an effective and efficient method of encouraging energy efficiency in a manner consistent with the outcomes sought by the relevant objectives. The provisions are considered the most appropriate way to achieve the objectives.

		Forests are important “sinks” which trap and breakdown greenhouse gases. Districts with a large rural hinterland are the most likely location for future carbon “sinks”. Woodlots for firewood are temporary “sinks” but are a renewable non-fossil source of domestic heat. Any adverse consequence in terms of air pollution is overcome by high temperature insulated fireboxes, which combust the greater part of the wood and are virtually smokeless.	

Utilities Objectives

<u>Proposed Objective</u> 17.3.5 Co-ordinate the provision of utilities with the development of the District

<u>Proposed Objective</u> 17.3.6 The establishment, efficient use and maintenance of utilities necessary for the well-being of the community.

<u>Proposed Objective</u> 17.3.7 Avoid remedy or mitigate the adverse effects of utilities on the surrounding environments, particularly those in or on land of high landscape value, and within special character areas.

(Strategic Directions Chapter – Proposed Objectives): – Objective 3.2.1.3; Objective 3.2.1.5; Objective 3.2.2.1**.**

Summary of proposed provisions that give effect to these objectives:

- New policies to provide for the requirements of the NSPET.
- Development standards which provide clarity to permitted activities.
- Development standards which reflect the requirements of the NSPET.
- Permitted activity status for any utility which is not defined as a controlled or discretionary or non-complying activity to remain.
- Lines and supporting structures to convey electricity up to 110kV (except minor upgrading) remains a controlled activity.
- Flood protection works remain a discretionary activity.
- Waste management facilities remain a discretionary activity.
- Lattice towers or overhead lines and support structures and any mast for any purpose (except street lighting) and antenna greater than 1.2m in diameter (except omin-directional or whip antenna not exceeding 4 metres in length) remain non-complying activities within the Remarkables Park Zone.
- Setbacks from internal boundaries and road boundaries to be set back in accordance with the setback requirements for accessory buildings in the zone in which it is located
- Standard relating to Height to remain.
- Non notification of controlled activity applications.

Proposed provisions	***Environmental, Economic, Social and Cultural Costs***	***Environmental, Economic, Social and Cultural Benefits***	***Effectiveness, Efficiency & Appropriateness***
Utilities Policies – Co-ordinated Development ***Proposed Policy 17.3.6.1*** *To ensure the provision of utilities to service new development prior to buildings being occupied, and activities commencing.* ***Proposed Policy 17.3.6.2*** *To ensure the proper management of solid waste by:* *(i) providing landfill sites for the present and future disposal of solid waste;* *(ii) assessing trends in solid waste; and* *(iii) identifying solid waste sites for future needs.* ***Proposed Policy 17.3.6.3*** *To recognise the future needs of utilities and ensure their provision in conjunction with the provider.* ***Proposed Policy 17.3.6.4*** *To assess the priorities for servicing established urban areas, which are developed but are not reticulated.* ***Proposed Policy 17.3.6.5*** *To ensure reticulation of those areas identified for urban expansion or redevelopment is achievable, and that a reticulation system be implemented prior to subdivision.*	Costs associated with complying with Plan requirements.	These provisions enable the various objectives to be given effect to by providing for the co-ordinated development of local, regional and nationally significant infrastructure.	These policies are effective and efficient as they give effect to the various objectives by encouraging a co-ordinated approach between the development of the District and the provision of utilities and services. This is necessary to ensure areas are capable of being serviced and that the timing of services facilitates development of an area. These provisions are considered the most appropriate way to achieve the objectives.
Establishment of Utilities ***Proposed Policy 17.3.7.1*** *To recognise the need for maintenance or upgrading of a utility to ensure its on-going use and efficiency.*	No significant costs identified.	The policies provide an enabling framework for the establishment, efficient use and maintenance of utilities. The District Plan establishes a framework within which utilities	The utilities policies provide an efficient and effective regulatory and management framework for local, regional and nationally significant infrastructure. This framework will provide for the development of utilities whilst

Proposed provisions	***Environmental, Economic, Social and Cultural Costs***	***Environmental, Economic, Social and Cultural Benefits***	***Effectiveness, Efficiency & Appropriateness***
Proposed Policy 17.3.7.2 *To take economic costs and strategic needs into account when considering the alternative locations, sites or methods for the establishment or alteration of a utility.* ***Proposed Policy 17.3.7.3*** *To encourage the co-location of facilities where operationally and technically feasible.* ***Proposed Policy 17.3.8.2*** *To require the undergrounding of services in new areas of development where technically feasible.* ***Proposed Policy 17.3.8.3*** *To encourage the replacement of existing overhead services with underground reticulation or the upgrading of existing overhead services where technically feasible.* ***Proposed Policy 17.3.8.4*** *To take account of economic and operational needs in assessing the location and external appearance of utilities.*		can be planned with greater certainty.	minimising adverse environmental effects. These policies are considered the most appropriate way to achieve the objectives.
Provisions relating to National Grid ***Proposed Policy 17.3.7.4*** *To 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:* *a. Buildings, structures and vegetation within*	Potential for reduced development potential of sites that include the Transmission Corridor. The objectives and policies outlined in the NPS ET are specific and are not fully given effect to by the existing	Transpower has refined its approach to electricity transmission corridor management, by introducing a "National Grid Yard" calculated based on risks from development for the different size transmission lines, and allowing appropriate land use	The proposed policy is considered to be efficient in that it seeks to provide for the requirements of the NPSET. The policy directs the management of effects generated by the national transmission network, and the management of effects on the

Proposed provisions	***Environmental, Economic, Social and Cultural Costs***	***Environmental, Economic, Social and Cultural Benefits***	***Effectiveness, Efficiency & Appropriateness***
close proximity to existing transmission corridors shall be controlled to avoid, remedy or mitigate any adverse effects on the safe and efficient development, operation and maintenance of the electricity transmission network *b. Discouraging sensitive activities from locating within the electricity transmission yard to minimise potential reverse sensitivity effects on the transmission network;* *c. Managing subdivision within the electricity transmission corridors to achieve the outcomes in (a) and (b) and to facilitate good amenity and urban design outcomes; and* *d. Not foreclosing operation or maintenance options or, to the extent practicable, the carrying out of routine and planned upgrade works.* ***Utilities Standards*** ***Proposed Rule 17.4.2.9*** *Lines and Supporting Structures – except minor upgrading – Discretionary Activity* ***Proposed Rule 17.5.10 -*** ***National Grid Corridors*** *(A) The following buildings and structures are permitted within the National Grid Yard which is delineated on the District Plan Maps:* *(a) A non-conductive fence located 5m or more from any National Grid Support Structure and no more than 2.5m in height* *(b) Any utility within a transport corridor or any part of electricity infrastructure that connects to the National Grid*	objectives and policies in the Operative District Plan, it is important to recognise that the NPS only applies to one transmission line that runs through the District. This line is managed by Transpower, who provided feedback during the Council's monitoring of the existing Utilities provisions and provided preliminary advice in terms of implementation of the NPSET.	activities and managing inappropriate land use activities within this yard. This refined approach has been adopted in the proposed policy and proposed rule 17.5.10. Clear provisions relating to the construction, upgrading and maintenance of the National Grid electricity network in a safe manner in accordance with the NPS ET.	network generated by development in close proximity to it. The new policy is aligned with objective 17.3.2. This is considered appropriate as it recognises the importance of the transmission corridor, and the importance of avoiding the location of sensitive activities within that corridor. The proposed additions to policy will effectively align the Plan with the NPSET in particular various policy aspects of the NPSET including policies 2, 3, 7, 8, and 10. The proposed rules will ensure Electricity Transmission infrastructure can be developed efficiently in the District. The rule proposed will effectively avoid any conflict and will ensure the Plan is aligned with the requirements of the NPS provisions. The efficiency and effectiveness of the proposed policy will assist in achieving objective 17.3.7. A new rule referring to the NPSET is considered appropriate as it ensures the Plan gives effect to the NPS and

Proposed provisions	***Environmental, Economic, Social and Cultural Costs***	***Environmental, Economic, Social and Cultural Benefits***	***Effectiveness, Efficiency & Appropriateness***
(c) Any new non-habitable building less than 2.5m high and 10m2 in floor area *(d) Any non-habitable building or structure used for agricultural activities provided that they are:* *(i) Located at least 12m from a National Grid Support Structure* *(ii) Not a milking shed/dairy shed (excluding the stockyards and ancillary platforms), or a commercial glasshouse* *(e) Alterations to existing buildings that do not alter the building envelope.*			users of the Plan are made aware of the NPSET requirements. This provision is considered effective as it provides certainty around development within the vicinity of Transmission Corridors. The proposed policy and rules have been assessed as the most appropriate way to achieve the objectives.
Proposed Utilities Policy 17.3.7.5 *To 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 and maintenance, to ensure the long-term efficient and effective functioning of that utility.*	Subdivision, use and development can result in adverse effects, including reverse sensitivity effects, on existing or proposed utilities. Potential for conflict with adjoining landowners over perceived reverse sensitivity issues. Potentially some restrictions on how private land can be used close to infrastructure	Utilities are protected from incompatible subdivision, use and development. The District Plan establishes a framework within which utilities can be planned with greater certainty. Fewer complaints from adjoining landowners affected by the development, operation and maintenance of utilities. Seen to be complying with relevant National Environmental Standards and National Policy Statements.	The proposed policy gives effect to objective 17.3.7 through clear recognition that amenity values will need to be balanced with the functional requirements of utilities. The policy will provide for the efficient development, use and maintenance of utilities. The efficiency and effectiveness of the proposed policy will assist in achieving the proposed objective. The proposed policy has been assessed as the most appropriate way to achieve the objectives.

Proposed provisions	***Environmental, Economic, Social and Cultural Costs***	***Environmental, Economic, Social and Cultural Benefits***	***Effectiveness, Efficiency & Appropriateness***
Proposed Utilities Policy 17.3.8.1 *To reduce adverse effects associated with utilities by:* *(a) Avoiding or mitigating their location on sensitive sites, including heritage and special character areas, Outstanding Natural Landscapes and Outstanding Natural Features, and skylines and ridgelines,* *(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, and* *(e) Integrating utilities with the surrounding environment; whether that is a rural environment or existing built form.*	Utility operators maybe constrained by having to avoid locating apparatus on sensitive sites. Does not recognise that the operational and technical requirements of utilities which can influence where it can be located.	Appropriate siting at the outset will prevent future upgrades being frustrated by reverse sensitivity effects. Investment in utilities will be optimised through siting decisions that provide for maximum use of the infrastructure. This policy will also have beneficial environmental and social outcomes, through the management of adverse amenity effects. This coordination of large numbers of utilities in key sites has assisted in reducing the visual impacts of utilities in the Queenstown District. However it is noted that some of the key utility sites are nearing capacity in terms of the amount of equipment that can operate from them, such as the telecommunications site at the top of Deer Park Heights. There is therefore a need for a continued co-ordinated approach to ensure good resource management outcomes continue to be achieved in the future.	This proposed policy is considered to be efficient in terms of District Plan administration through providing clear guidance of the expected environmental outcomes for Utilities. The proposed policy is considered to be effective in providing clear guidance to utility operators in terms of locational considerations and focusing on reducing adverse effects where practicable. The proposed policy has been assessed as the most appropriate way to achieve the objectives.

Proposed provisions	***Environmental, Economic, Social and Cultural Costs***	***Environmental, Economic, Social and Cultural Benefits***	***Effectiveness, Efficiency & Appropriateness***
Proposed Utilities Rule 17.4.2.7 ***Controlled Activity Telecommunication and Radiocommunication Facilities, Navigation, Meteorological Facilities*** *Any telecommunication and radiocommunication facility, navigation or meteorological communication facility where it involves erecting:* *(a) Within the Rural General Zone any mast greater than 8m but less than or equal to 15m in height.* *(b) Within the Town Centre Zones (Arrowtown, Queenstown and Wanaka) any mast greater than 8m but less than or equal to 10m in height.* *(c) 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.* *(d) 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.* *The Council has reserved its control in respect of location, external appearance and access.*	No costs have been identified for these rules.	More clarity for plan users. Antennae of all shapes covered by the rules.	This rule is considered to be neutral in terms of efficiency. The proposed rule is effective in providing for all shapes of antennae associated with telecommunication and radiocommunication facilities. The proposed rule has been assessed as the most appropriate way to achieve the objectives.
Proposed Utilities Rule 17.4.2.8 ***Controlled Activity Buildings*** *The addition, alteration or construction of buildings greater than 10m^2 in area and 3m in height, other than masts for any telecommunication and radiocommunication facility, navigation or meteorological*	No costs have been identified for these rules.	Increased clarity as to when resource consents are required.	It is proposed to carry over the District Plan rule which provides for buildings associated with Utilities as a controlled activity. The rule has been refocused to make it less confusing and therefore more effective in

Proposed provisions	***Environmental, Economic, Social and Cultural Costs***	***Environmental, Economic, Social and Cultural Benefits***	***Effectiveness, Efficiency & Appropriateness***
communication facility or supporting structures for lines. *Control is reserved in respect of location, external appearance, associated earthworks, access and landscaping.* *This rule shall not apply to structures up to 10m² in area and less than 3m in height above ground level;* *nor shall it apply where buildings are:* • *Specified as being a discretionary activity in the zone which they are located; or* • *Located in the Rural General zone; or* • *Located on the site of a protected feature as identified in Appendix 3.* *In the above cases the rules in the underlying zone shall apply.* *(Excludes buildings and structures [other than masts for any telecommunication and radiocommunication facility, navigation or meteorological communication facility or supporting structures for lines] in areas of significant indigenous vegetation; the Residential Arrowtown Historic Management Zone and the Remarkables Park Zone) which are discretionary activities under Rule 17.4.2.11.*			achieving the objectives and policies relating to Utilities. It is considered that efficiency will be increased as a result of greater clarity. The proposed rule has been assessed as the most appropriate way to achieve the objectives.
Proposed Utilities Rule 17.4.2.9 *Lines and Supporting Structures – except minor upgrading – Discretionary Activity* ***Proposed Utilities Rule 17.4.2.10*** *Telecommunication and Radiocommunication Facilitates, Navigation, Meteorological Facilities – Discretionary Activity*	Cost to utility operators of having to obtain resource consents. The proposed rules require a resource consent to locate any line and supporting structures (except minor upgrading), mast, antenna or buildings (except buildings less than $10m^2$ in area	Greater protection afforded to ONL and ONF landscapes in terms of potential adverse effects from utility activities.	The discretionary activity status is an effective method to manage the adverse effects of Utilities activities on a case by case basis, while retaining the ability to consider positive effects. This proposed rule will assist in achieving proposed objective

Proposed provisions	***Environmental, Economic, Social and Cultural Costs***	***Environmental, Economic, Social and Cultural Benefits***	***Effectiveness, Efficiency & Appropriateness***
Proposed Utilities Rule 17.4.2.11 Buildings *Any addition, alteration or construction of buildings and structures, other than masts for any telecommunication and radiocommunication facility, navigation or meteorological communication facility or supporting structures for lines* *in:* *(a) Any areas of significant indigenous vegetation* *(b) The Residential Arrowtown Historic Management Zone.* *(c) The Remarkables Park Zone* ***Proposed Utilities Standard 17.5.7*** ***Buildings in Outstanding Natural Landscapes and Outstanding Natural Features*** *Any building within an ONL or ONF shall be less than 10m2 in area and less than 3m in height.*	and less than 3m in height) within an ONL or ONF. The activity status is a discretionary activity, whereby the Council can consider a proposal in relation to the effects of the activity, both positive and adverse, at a given site on a case by case basis.		17.3.8 and the other objectives relevant to development within Outstanding Natural Landscapes and Outstanding Natural Features which seek to protect the distinctive landscapes from inappropriate subdivision, development and use. This is considered to be an efficient method of managing and providing for utilities within the ONL and ONF landscapes. Retaining full discretion in considering utilities buildings in the distinctive landscapes on a case by case is appropriate. The proposed rules and utilities standard have been assessed as the most appropriate way to achieve the objectives.
Proposed Utilities Rule 17.4.2.10 Discretionary Activity Telecommunication and Radiocommunication Facilitates, Navigation, Meteorological Facilities *Any telecommunication and radiocommunication facility, navigation or meteorological facility where it involves:* *(a) 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*	Potential cost to Utility operators from having to obtain resource consents to locate apparatus in sensitive areas. More restrictive provisions within sensitive areas (historic precincts, open space zones and Town Centres). The proposed changes reflect the	Greater protection of the amenity values of sensitive areas due to controls on height and appearance. The height standards are more permissive to provide for masts etc within the business and industrial zones.	The rule is considered effective and efficient in managing and providing for telecommunication and radiocommunication; navigation and meteorological facilities in defined areas of ONL and ONF and other sensitive areas. Retaining full discretion in

Proposed provisions	***Environmental, Economic, Social and Cultural Costs***	***Environmental, Economic, Social and Cultural Benefits***	***Effectiveness, Efficiency & Appropriateness***
another shape) in: *(i) Any Outstanding Natural Landscape or Outstanding Natural Feature;* *(ii) Area of Significant Indigenous* *(iii) The Residential Arrowtown Historic Management Zone.* *(iv) Any open space and landscape buffer areas identified on any of the Special Zone structure plans (Part 12)* *(v) Town Centre Special Character Areas and Heritage Precincts* *(b) 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 Residential Arrowtown Historic Management Zone), Rural Lifestyle, Rural Residential, Township, Resort, Airport Mixed Use, Visitor, Town Centre, Corner Shopping Centre, Bendemeer, Penrith Park and Business Zones.* *(c) Erecting any antenna greater than 2.4m in diameter length or breadth and/or 4m in length if a whip antenna, in Rural General Zones.* *(d) Erecting a mast which is over 15m in height in the Rural General zone.* *(e) In all other zones including the Town Centre Zones (Arrowtown, Queenstown and Wanaka) 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.* *(f) In the Business and Industrial Zones, and in all other zones with a maximum building*	importance of managing adverse effects from utilities within these areas.		considering utilities buildings in the distinctive landscapes on a case by case is appropriate. The proposed rule has been assessed as the most appropriate way to achieve the objectives.

Proposed provisions	***Environmental, Economic, Social and Cultural Costs***	***Environmental, Economic, Social and Cultural Benefits***	***Effectiveness, Efficiency & Appropriateness***
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.			
Proposed Utilities Standard Rule 17.5.9 Compliance with New Zealand Standards	Cost to applicants associated with site management and potential for resource consent requirements.	Adverse effects on surrounding waterways and possibility of risk of failure of earthworks and facilities may be reduced by ensuring that appropriate New Zealand Standards are compiled with.	This rule is considered to be neutral in terms of efficiency. This rule is effective in that it requires adherence to New Zealand Standards to avoid, remedy or mitigate the adverse effect of utilities (including their construction) on the surrounding environments. New Zealand Standards 4404:2011 is the accepted best practice standard for engineering works including assessment and design to ensure structures are resilient to hazards. It is appropriate to require that utility activities comply with this standard. If the standard is not met then a discretionary activity consent would be required. The proposed rule has been assessed as the most appropriate way to achieve the objectives.

Proposed provisions	***Environmental, Economic, Social and Cultural Costs***	***Environmental, Economic, Social and Cultural Benefits***	***Effectiveness, Efficiency & Appropriateness***
Proposed District Plan Map Amendments	Potential for reduced development opportunities of sites that include the Transmission Corridor.	Clear provisions relating to the construction, upgrading and maintenance of the National Grid electricity network in a safe manner in accordance with the NPSET.	It is proposed to add a "Transmission Corridor" to the District Plan Maps along the length of the current Cromwell to Frankton 110kV line where it traverses the District. This is to identify the corridor and allow rules to be developed to control what can occur in these areas in accordance with the NPSET provisions. Consultation with Transpower New Zealand and a review of their future plans as outlined in their Annual Plan 2012 has revealed that no new 110kV (or greater) line is proposed over the Plan life therefore no other corridors are required to be established. The corridor shall be identified in accordance with Figure 2 of the Transmission Corridor Activity Management of the *National Policy Statement on Electricity Transmission: Further Guidance on Risks of Development near High Voltage Transmission Lines.* This provision is considered effective as it provides certainty around development within the vicinity of Transmission Corridors.

Proposed provisions	***Environmental, Economic, Social and Cultural Costs***	***Environmental, Economic, Social and Cultural Benefits***	***Effectiveness, Efficiency & Appropriateness***
			The rule is efficient in that it provides certainty in relation to the consenting process. This provision is considered the most appropriate way to achieve the objectives.
Proposed Utilities Rule 17.4.2.5 *Any **utility** which is not listed as a Controlled or Discretionary or Non-Complying Activity in Rules 17.4.2.6 – 17.4.2.15 is a **Permitted Activity*** ***Proposed Utilities Rule 17.4.2.6*** ***Lines and Supporting Structures – except minor upgrading*** *A conductor line, or support structure 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 purpose including telecommunications in all zones. This rule shall not apply to minor upgrading as defined.* *The Council has reserved its control in respect of location or route, height and appearance of supporting structures and number of overhead lines.* ***Proposed Utilities Rule17.4.2.9*** ***Lines and Supporting Structures – except minor upgrading*** *Any line or support structure where it involves:* *(a) Erecting any lattice towers for overhead lines to convey electricity in all zones;* *(b) Erecting any support structures for new overhead lines to convey electricity (at a*	Costs associated with complying with Plan requirements.	These provisions enable the various objectives to be given effect to by maintaining the levels of amenity expected within the various zones and putting appropriate controls around activities that could cause adverse environmental effects, or need specific consideration. These provisions further provide for local, regional and nationally significant infrastructure. Address specific issues, associated with utilities activities and managing the effects of such activities throughout the various zones in the District.	These provisions will be carried over and are effective and efficient as they give effect to the various objectives by placing appropriate controls on utilities activities, whilst continuing to enable the establishment, operation/use, maintenance and upgrade of utilities activities. These provisions are considered the most appropriate way to achieve the objectives.

Proposed provisions	***Environmental, Economic, Social and Cultural Costs***	***Environmental, Economic, Social and Cultural Benefits***	***Effectiveness, Efficiency & Appropriateness***
voltage of more than 110kV with a capacity over 100MVA) in all zones; *(c) 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 Area of Significant Indigenous Vegetation;* *(d) Utilising any existing support structures for the erection of cable television aerials and connections;* *(e) Erecting any support structures for overhead lines for any purpose in the area in Frankton known as the "Shotover Business Park" (as identified on the District Plan Maps;* *except where: any new poles are solely for the purpose of providing street lighting.* ***Proposed Rule 17.4.2.12*** ***Flood Protection Works*** *The construction of any new flood protection works shall be a discretionary activity (non-notified), provided that this standard shall not apply to any works carried out in relation to the maintenance, reinstatement 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.* ***Proposed Rule 17.4.2.13*** ***Waste management facilities***			

Proposed provisions	***Environmental, Economic, Social and Cultural Costs***	***Environmental, Economic, Social and Cultural Benefits***	***Effectiveness, Efficiency & Appropriateness***
Proposed Rule 17.4.2.14 *Any utility, except overhead conductors lines and supporting structures (including minor upgrading), which does not comply with one or more of the following site standards shall be a Discretionary Activity with the exercise of the Council's discretion being confined to the matter(s) specified in the Utilities Standard(s) not complied with.* ***Proposed Rule 17.4.2.15*** *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 1.2m in diameter, length or breadth (except omni-directional or 'whip' antenna which should not exceed 4 metres in length).*			
Definitions ***UTILITY*** *– Means the systems, services, structures and networks necessary for operating and supplying essential utilities and services to the community including but not limited to:* *a. transformers, lines and necessary and incidental structures and equipment for the transmissions and distribution of electricity.* *b. Pipes and necessary incidental structures and equipment for transmitting and distributing gas.* *c. Storage facilities, pipes and necessary incidental structures and equipment for the supply and drainage or water or sewage.* *d. water and irrigation races, drains, channels, pipes and necessary incidental structures and equipment.*	Using the utility provisions for private utility development will not be possible under the new definition. Resource consents will be required for private infrastructure under normal provisions for the zone where they are proposed.	The utility provisions will be used for their intended purpose i.e. to provide for the efficient provision of essential utilities that provide a wider community benefit.	The proposed definition is considered to be efficient and effective in terms of the administration of the District Plan. Further, definitions are an effective and efficient way of categorising activities for the purpose of administration of rules. The definition is considered to be the most appropriate way to achieve the objectives.

Proposed provisions	***Environmental, Economic, Social and Cultural Costs***	***Environmental, Economic, Social and Cultural Benefits***	***Effectiveness, Efficiency & Appropriateness***
e. structures, facilities, plant and equipment for the treatment of water. *f. structures, facilities, plant, equipment and associated works for receiving and transmitting telecommunications and radiocommunications (see definition of telecommunication facilities).* *g. structures, facilities, plant, equipment and associated works for monitoring and observation of meteorological activities and natural hazards.* *h. structures, facilities, plant, equipment and associated works for the protection of the community from natural hazards.* *i. structures, facilities, plant and equipment necessary for navigation by water or air.* *j. waste management facilities.* *k. Anything described as a network utlity operation in s166 of the Resource Management act 1991* *Utility does not include structures or facilities used for electricity generation, the manufacture and storage of gas, or the treatment of sewage.*			

12. The risk of not acting

Section 32(2)(c) of the Act requires, in the evaluation of the proposed policies and methods, the consideration of the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the policies, rules or other methods.

For the District Plan review of the Energy and Utilities provisions, it is considered that there is certain and sufficient information on the effects of Energy and Utilities activities, and how to manage potential effects to achieve the purpose of the Act. An assessment of the risk of acting or not acting is not required under section 32(2)(c).

13. Summary

Having consideration for the proposed objectives, it is considered to be the most appropriate way of achieving the purpose of the Act in terms of providing for and managing potential effects of Energy and Utilities (s32(1)(a). The proposed provisions contained in the proposed Energy and Utilities chapter are considered to be the most appropriate way to achieve the proposed objectives, and the relevant objectives of the District Plan that are part of the proposed Strategic Directions Chapter (s32(1)(b).