

## **Section 2.9 Energy, Minerals and Infrastructure**

---

Energy, minerals and infrastructure are incorporated into one Section of the District Plan in acknowledgement of the strategic importance of a coordinated approach to these matters. In particular there is a close association between the development of energy resources, the generation of electricity and the provision of essential infrastructure throughout the District.

### **Energy and Minerals**

Energy and mineral resources play a key role in the socio-economic wellbeing and growth of the District. For example quarries and aggregates for agricultural products, building materials and roading materials, provide important social and economic benefits. A range of renewable and non-renewable energy and mineral resources are located within the District. While the development of these resources and the generation of energy can provide wide-ranging benefits, they can also give rise to adverse environmental effects. Renewable energy resources provide significant opportunities for sustainable energy generation. The benefits of renewable energy are recognised by central government through the National Policy Statement for Renewable Electricity Generation 2011. Southland has existing wind and hydro electricity generation facilities located within the District including the Manapouri Power Station, Monowai Power Station and White Hill Wind Farm. Where the objectives and policies refer to 'energy' this should be areas as including renewable electricity generation as is identified in the explanations to the policies. This avoids duplication of policies, while still giving effect to the National Policy Statement for Renewable Electricity Generation.

### **Infrastructure**

Infrastructure provides services essential to the maintenance and enhancement of social and economic wellbeing at local, regional and national levels and plays a key role in enabling effective and efficient functioning of the District. Given its strategic importance, it is vital that infrastructure is developed, operated, maintained and upgraded in a safe, effective and efficient manner. While infrastructure provides wide-ranging benefits, its development, operation, maintenance and upgrading has the potential to generate adverse environmental effects. These effects may be in the form of visual intrusion or the generation of odour, dust or noise. Typically, adverse effects arise where infrastructure is of a scale, or at a location, which is incompatible with neighbouring land use or the surrounding environment. In some cases, infrastructure is not well integrated with subdivision, land use and development. Infrastructure can be subject to the effects of climate change and natural hazards events and it is important that it is developed, operated, maintained, upgraded or relocated to take account of the risks posed. This will ensure that the provision of services is not compromised. The strategic importance of infrastructure should be recognised and provided for by Council. In many cases this will be by way of a Designation. Council must balance an enabling approach while ensuring that any adverse effects associated with infrastructure are avoided, remedied, or mitigated. To carry out this function, controls on the effects of infrastructure and the effects on infrastructure, are required.

The importance of enabling existing electricity transmission activities is acknowledged through the National Environmental Standard for Electricity Transmission Activities which came into effect on 14 January 2010. This National Standard takes precedence over any rules in the District Plan relating to operation, maintenance, upgrading, relocation and removal of national grid electricity transmission facilities that existed on 14 January 2010. This applies to all zones in the Southland District Plan.

The National Policy Statement on Electricity Transmission 2008 (NPSET) recognises the national significance of the need to operate, maintain, develop and upgrade the electricity transmission network and Section 75 (3) of the RMA requires district plans to give effect to the NPSET. In particular the NPSET requires decision makers to recognise and provide for the national, regional and local benefits of sustainable, secure and efficient electricity transmission, and to recognise and provide for the effective operation, maintenance, upgrading and development of the network.

The importance of providing for enhanced telecommunication activities is acknowledged through the National Environmental Standard for Telecommunications Facilities which came into effect on 9 October 2008 and was updated in 2016. The National Standard is primarily about telecommunication equipment in the road reserve and also deals with radio frequency fields, noise from telecommunications cabinets and the installation of masts or antennae on existing structures.

## **Energy and Minerals**

### **Objective ENGM.1**

Energy and mineral resources are developed and electricity is generated, in a manner that avoids, remedies or mitigates the adverse effects on the environment.

### **Objective ENGM.2**

To recognise that energy and mineral resources are important to the current and foreseeable needs of Southland and New Zealand.

### **Policy ENGM.1**

Provide for the investigation and development of renewable electricity and energy resources and non-renewable energy and mineral resources whilst avoiding, remedying or mitigating adverse effects on the environment.

**Explanation:** Energy and mineral resources play a key role in the functioning of the District and it is important that they are developed and energy is generated, to meet current and foreseeable needs. The development of these resources and the generation of electricity can give rise to adverse effects on the environment, in particular the character and amenity of the environment in which it is located. These adverse effects must be avoided, remedied or mitigated. Particular consideration should also be given to the avoidance of adverse effects on public health and safety.

### **Policy ENGM.2**

To enable the operation, maintenance, repowering, upgrade and development of existing renewable electricity generation activities.

**Explanation:** There are existing renewable electricity generation activities within the Southland District. To give effect to the National Policy Statement for Renewable Electricity Generation it is important that the generation capacity from these facilities can be maintained. This policy will provide for these existing activities to continue within the District.

### **Policy ENGM.3**

Recognise the local, regional and national benefits associated with the development of energy and mineral resources and the generation of electricity.

**Explanation:** The development of energy and mineral resources and the generation of electricity can give rise to local, regional and national benefits. It is important that these benefits are considered when assessing resource consent applications for the investigation and development of energy and mineral resources and the operation, maintenance and upgrading of energy generation activities. The National Policy Statement for Renewable Electricity Generation 2011 identifies that the benefits of renewable electricity generation are of national significance. The local, regional and national benefits of renewable electricity resources, particularly in association with climate change, are widely recognised and the development of renewable electricity resources and associated renewable electricity generation should be promoted.

### **Policy ENGM.4**

Recognise that development of energy and mineral resources and the generation of electricity can have a functional, technical or operational requirement to be sited at a particular location.

**Explanation:** Energy and mineral resource development and particularly renewable energy production needs to be in areas where the natural resource is located. The effects of such activities on the natural character of the amenity of the surrounding environment need to be managed and given careful consideration as part of the investigation and development of these resources.

### **Policy ENGM.5**

Protect the development of energy and mineral resources and the generation of electricity, including renewable energy, from the reverse sensitivity effects of incompatible subdivision, land use and development.

**Explanation:** The development of energy and mineral resources and the generation of electricity have the potential to give rise to adverse effects on neighbouring land use and surrounding areas. Often these effects arise where these activities are incompatible with neighbouring activities. A common adverse effect that can arise is reverse sensitivity.

To ensure the ongoing development of energy and mineral resources and generation of electricity, the presence and function of the energy and mineral resources should be recognised and careful consideration should be given to activities proposed to be located in the vicinity of existing or consented facilities.

### **Policy ENGM.6**

Recognise and provide for the development, operation, maintenance, repowering and upgrading of new and existing renewable electricity generation activities, in a manner that:

1. Recognises the need to locate renewable electricity generation activities where the renewable electricity resources are available.
2. Recognises logistical and technical practicalities associated with developing, upgrading, operating and maintaining renewable electricity generation activities.
3. Encourages, facilitates and provides for research and exploratory-scale investigations into existing and emerging renewable electricity generation technologies and methods.

**Explanation:** The benefits associated with renewable electricity resources are widely recognised and the development of renewable electricity resources and associated renewable electricity generation must be promoted. This supports the government’s target of increasing the percentage of electricity generated by renewable energy by 2025. To achieve this target it will be necessary for both the current electricity generation capacity to be retained as well as needing the development of additional electricity generation activities.

### **Policy ENGM.7**

Provide for the investigation, development, operation, maintenance and upgrading of small and community-scale distributed renewable energy generation.

**Explanation:** Small and community-scale distributed renewable energy generation activities benefit a particular site or immediate community by increasing the security and reliability of energy supply. In some cases small and community-scale distributed renewable energy generation activities also provide these benefits to the national grid. The ability for small and community-scale distributed renewable energy generation activities to provide opportunities for individuals, businesses and communities to provide for their own needs should be encouraged, however, careful consideration must be given to avoid, remedy or mitigate adverse effects of these activities on the environment.

### **Policy ENGM.8**

Provide for offsetting measures or environmental compensation where any residual environmental effects of renewable electricity generation activities cannot be avoided, remedied or mitigated.

**Explanation:** The adverse effects from renewable electricity generation activities should as far as possible be avoided, remedied or mitigated. However, where there are any residual environment effects, consideration should be given to offsetting measures or compensation which benefits the environment and community affected. The Regional Policy Statement contains principles in relation to biodiversity offsets and other references to offsetting measures and environmental compensation which are to be implemented.

## **Energy and Minerals Rules**

Rules relating to Energy and Minerals, including on-farm gravel extraction for maintenance activities, are contained within the Urban Zone, Rural Zone, Industrial Zone, Fiordland/Rakiura Zone and Noise sections of the District Plan.

## **Infrastructure**

### **Objective INF.1**

To ensure that infrastructure meets the current and foreseeable needs of the District whilst ensuring that the adverse effects on the environment are avoided, remedied or mitigated.

### **Policy INF.1**

Recognise and provide for the development, operation, maintenance upgrading or relocation of infrastructure, particularly regionally significant infrastructure, whilst avoiding, remedying or mitigating the adverse effects of that infrastructure on the environment.

**Explanation:** Infrastructure plays a key role in the functioning of the District, however, it can give rise to adverse effects on the environment, in particular on character and amenity. Adverse effects on amenity values should be avoided, remedied or mitigated. Particular consideration should be given to the avoidance of adverse effects on public health and safety. Consideration should be given to the consolidation of infrastructure where practicable.

### **Policy INF.2**

Recognise that infrastructure can have a functional, technical or operational requirement to be sited at a particular location.

**Explanation:** Typically infrastructure is located where it will achieve optimal operational efficiencies and often the functional, technical and operational constraints of infrastructure dictate the location of that infrastructure. In some cases this location may not achieve 'best fit' with the character or amenity of the surrounding environment. Therefore careful consideration must be given to the design, operation, maintenance and upgrading of that infrastructure to avoid, remedy or mitigate any adverse effects.

### **Policy INF.3**

Protect infrastructure, particularly regionally significant infrastructure, from incompatible subdivision, land use and development.

**Explanation:** A common adverse effect associated with infrastructure is reverse sensitivity. Typically this arises where inappropriate subdivision, land use or development occurs in the vicinity of existing or proposed infrastructure. To ensure the ongoing operation, maintenance and upgrading of infrastructure, the presence and function of the infrastructure should be recognised and careful consideration should be given to subdivision, land use and development where it is to be located in the vicinity of existing or proposed infrastructure.

### **Policy INF.4**

Infrastructure, particularly regionally significant infrastructure, should be located so that the effects of climate change and natural hazards are avoided or mitigated.

**Explanation:** Infrastructure is subject to the effects of climate change and natural hazards. The development, operation, maintenance and upgrading of infrastructure should take account of the risks posed by climate change and natural hazards to ensure that the provision of infrastructure services is not compromised. This is particularly important for regionally significant infrastructure. It is acknowledged as in Policy INF.2 that some regionally significant infrastructure will have technical requirements to be located in areas that may be subject to natural hazards, for example hydro-generation facilities.

## **Infrastructure Rules**

**Note:** District-wide rules

The rules in the Infrastructure section override Zone and district-wide rules of the District Plan with the exception of Rule INF.6(1) General Infrastructure Standards.

The National Environmental Standard for Electricity Transmission Activities contains rules for the operation, maintenance, upgrading, relocation or removal of existing transmission lines. Except as provided for by the regulation, no rules in this plan apply to such activities.

The National Environmental Standards for Telecommunications Facilities provides standardised rules for certain low impact telecommunications equipment within legal road boundaries, and radiofrequency exposures in accordance with New Zealand Standard NZS 2772.1.1999. This standard establishes a baseline when considering the potential effects from the development of telecommunications facilities.

### Rule INF.1 - Permitted Activities

The following activities are **Permitted Activities**, provided they meet the General Infrastructure Standards:

1. The operation, maintenance, minor upgrading, repair or removal of any existing network utilities including the clearance, modification or removal of indigenous vegetation, undertaken by any network utility operator, for the purpose of ensuring the safety and integrity of existing infrastructure or to maintain access to that infrastructure.
2. Development, installation, maintenance and upgrading of network utilities located underground not otherwise provided for.
3. The maintenance and repair of existing formed roads including street furniture within the existing legal road, accessways and rights of way.  
(Note: Works to accessways and rights of way may require a permit under the Southland District Council Subdivision, Land Use and Development Bylaw 2012).
4. The construction or realignment of a road by Council, not within the Outstanding Natural Features and Landscapes Overlay or an area of significant indigenous vegetation or habitat of indigenous fauna.
5. The trimming and pruning of vegetation necessary to protect electric lines (required to meet the Electricity (Hazards from Trees) Regulations 2003) or telecommunication lines.
6. Minor upgrading of existing above-ground transmission and distribution lines and support structures.
7. Addition of telecommunications cables and lines to existing support structures.
8. Buildings housing network utilities (including cabinets, electricity transformers and switching stations) above-ground not exceeding 30 m<sup>2</sup> in area.
9. Dish antennae not exceeding 5 m<sup>2</sup> in area.
10. Extensions to, or new above-ground electricity or telecommunication distribution and transmission lines and single-pole support structures, where the existing distribution is overhead.
11. Generators including Emergency Generators, provided that they shall only operate:
  - (a) During emergency situations; or
  - (b) For standard performance testing procedures as required by law or by the engine manufacturer for emergency generators, or as a backup when the main power supply is undergoing maintenance, up to a maximum of 500 hours per calendar year; or
  - (c) Where they are required by network utility operators for maintenance works.
12. Wind monitoring masts provided that:
  - (a) The mast does not exceed a height of 100 metres.
  - (b) The mast is setback 500 metres from any dwelling and 100 metres from any property boundary.
  - (c) A notice of commencement is provided to Council prior to the construction of the mast.
  - (d) The mast is removed and the land remediated within five years of the notice of commencement.
  - (e) The mast is not within 50 metres of the highest point of the landscape on which it is located.
  - (f) The mast is not located within the Visual Amenity Landscape or Outstanding Natural Features and Landscapes as identified on the Planning Maps.

## Rule INF.2 - Permitted Activities

The following activities are permitted:

1. In the case of masts, poles and towers including associated telemetry and monitoring equipment (except as provided for under Rules INF.2 (3) and INF.2 (4) below), these shall comply with a maximum height of:
  - (a) 25 metres in Rural, Eweburn and Industrial Zones.
  - (b) 15 metres in the Urban Zone.
  - (c) 20 metres in the Fiordland/Rakiura Zone.
2. The construction of hose drying towers associated with Fire Stations up to a maximum height of 15 metres, provided they comply with the relevant zone minimum yards.
3. Aerials and antennae attached to masts, poles and towers may exceed the maximum height for masts, poles and towers as set out in Rule INF.2 (1) above and the maximum height for the Zone in which they are located, by up to 5 metres.
4. In the case of aerials and antennae and their brackets or attachments, that are located on buildings, these may exceed the maximum height to boundary standards for the Zone in which they are located by up to 5 metres.

## Rule INF.3 - Restricted Discretionary Activities

The following activities are **Restricted Discretionary Activities**:

1. The establishment, operation and maintenance of telecommunication lines, cables and support structures, aerials and antennae and telecommunications buildings that are not provided for in Rule INF.1, Rule INF.2 or INF.4.

The matters to which Council has restricted its discretion are:

  1. The degree and effects of non-compliance with the permitted activity standards.
  2. The visual effects of the utility structure.
  3. The location of the infrastructure.
  4. The effects on any Outstanding Natural Features and Landscapes
2. Wind Monitoring Masts that fail to comply with the permitted activity criteria.

The matters to which Council has restricted its discretion are:

  1. Navigational and safety requirements.
  2. The visual effects of the structure.
  3. The location and height of the structure.
  4. The duration of the structure.

## Rule INF.4 - Discretionary Activities

The following activities are **Discretionary Activities**:

1. Any activity that cannot be undertaken as a Permitted, Controlled or Restricted Discretionary Activity and is not listed as a Non-Complying Activity.
2. New transformers, substations and switching stations distributing electricity (including their ancillary buildings) that exceed 30 m<sup>3</sup> in area.
3. Underground gas transmission pipelines at a pressure 2,000 kilopascals or greater.
4. New water treatment facilities.
5. New wastewater treatment facilities provided that the facility is:
  - (a) Located a minimum of 150 metres from residential buildings and approved residential building platforms or buildings primarily occupied by people for whatever purpose, on adjacent properties.

- (b) Located a minimum of 300 metres from the Urban Zone.
- 6. The development of a railway line or siding.
- 7. The realignment of a formed road within the Outstanding Natural Features and Landscapes Overlay or within an area of significant indigenous vegetation or habitat of indigenous fauna.

### Rule INF.5 - Non-Complying Activities

The following activities are **Non-Complying Activities**:

1. Wastewater treatment facilities other than those identified as Discretionary Activities.
2. Any activity that does not comply with standards for telecommunication facilities generating radiofrequency fields.
3. The construction of a road within the Outstanding Natural Features and Landscapes Overlay or an area of significant indigenous vegetation or habitat of indigenous fauna.

**Note:** this rule applies regardless of whether the road is to be constructed within or outside of legal road.

### Rule INF.6 - General Infrastructure Standards

All Infrastructure Activities shall comply with the following General Infrastructure Standards:

1. The relevant noise, lighting and glare provisions of the Zone they are located in.
2. All above-ground network utility and meteorological structures, shall comply with the maximum height standards, maximum height to boundary and minimum yards (except where they relate to roads), for the Zone in which they are located, except as provided for in Rule INF.2.
3. Earthworks that:
  - (a) are greater than 20 metres from a waterbody that do not alter the existing ground level by more than 5 metres in depth or 2 metres in height;
  - (b) are within 20 metres of a waterbody that do not alter the existing ground level by more than 2 metres in depth or height; or
 are permitted provided that the activity:
  - (a) shall not be undertaken at an elevation greater than 700 metres above mean sea level, with the exception of earthworks ancillary to fencing activities;
  - (b) shall not be undertaken on slopes of more than 20° except cultivation; and/or cause slope instability;
  - (c) shall protect any stockpiles of material and all areas of bare ground created by the activity from soil erosion as soon as practicable;
  - (d) shall not be undertaken within 5 metres of any water body, including wetlands and coastal water, or flood protection works, except cultivation of a field or domestic gardening;
  - (e) shall not be undertaken on a contaminated or potentially contaminated piece of land unless it is in accordance with the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health 2011 contained in Schedule 5.8;
  - (f) does not affect the site of items listed in the Historic Heritage in Schedule 5.2;
  - (g) is not undertaken in an area of Outstanding Natural Features and Landscapes as shown on the District Plan Maps.
4. Earthworks within National Grid Yards are permitted provided that:
  - (a) Earthworks within 2.2 metres of a pole support structure or stay wire shall not be greater than 300 mm in depth.
  - (b) Earthworks between 2.2 metres and 5 metres of a pole support structure or stay wire shall not be greater than 750 mm in depth.

- (c) Earthworks within 12 metres of the outer edge of the visible foundation of a tower support structure shall not be greater than 300 mm in depth.
- (d) Earthworks shall not compromise transmission support structure stability.
- (e) Earthworks shall not result in a reduction of the existing conductor clearance distance above the ground as required in NZECP 34:2001.

Provided that the following activities are exempt from (4)(a) and (b) above:

- (i) earthworks undertaken by a Network Utility Operator; or
- (ii) earthworks undertaken as part of agricultural or domestic cultivation, or repair, sealing or resealing of a road, footpath or driveway.