

## 30 Electricity Generation Zone

### 30.1 Zone Statement

The district contains hydro electric power generating infrastructure that is of national significance to New Zealand's economy and prosperity. The Waikato River running through the district has five hydro electric power generating facilities located at Arapuni, Waipapa, Maraetai, Whakamaru and Atiamuri. These facilities represent a large financial investment and require a high level of operational certainty for their ongoing viability. Their original establishment involved a significant loss of natural areas and cultural sites due to the new water levels that were established.

The Waikato River forms part of the district boundary, with these hydro dams straddling the boundary with the Waipa District, Otorohanga District and Taupo District. Whilst the provisions of the South Waikato District Plan can only relate to land and water within the district (see also Chapter 16 Activities on the Surface of the Water) a high level of consistency of district plan provisions with adjoining districts is desirable to ensure efficient and effective functioning of the hydro system.

Each hydro electricity power station, hydro dam, associated facilities such as spillways, switchyards and transmission lines and structures, and the surrounding land, are known as electricity generation core sites. These core sites are covered by the Electricity Generation Zone. It is intended that the zone will provide operational certainty for the generation of electricity in a manner consistent with the National Policy Statement for Renewable Electricity Generation 2011.

The zone provisions seek to enable the existing hydro electric power generating activities to continue operating, with allowance made for necessary maintenance, repair and upgrading activities, while avoiding, remedying or mitigating any additional significant adverse effects on the environment. Provision has also been made for various temporary activities that are undertaken within core sites that may involve the use of heavy machinery such as drilling rigs and cranes. Visitor facilities related to the hydro operations are also a possibility.

The core sites are effectively industrial sites in, and adjoining the Waikato River. The sites have had an important role in shaping the present-day significant cultural, landscape, recreational and natural values that are found along the river corridor. The core sites are also located within rural environments with different levels of amenity and character. The avoidance of reverse sensitivity effects is an important aspect to the ongoing operation of the hydro electric power generating activities within the core sites. Within the Rural and Rural Residential Zone provisions, there are restrictions on the proximity of dwellings to the operating easements so as not to restrict the operational capacity and availability of the hydro electricity resource.

There are three heritage items that are listed in the South Waikato Heritage Inventory located within the Electricity Generation Zone at Arapuni. These are the Arapuni Suspension Bridge, the Arapuni Powerhouse, and the Arapuni Dam. All were built in the 1920s and represent a significant aspect of New Zealand's engineering history. There is also heritage within the core sites that is not related to the hydro scheme itself. Maintaining these heritage items within the context of an operating hydro electricity generation site is important.

Performance standards aim to facilitate the existing activities within the electricity generation core sites while ensuring that any new or additional potential significant adverse environmental effects arising from the hydro electric power generating activities are able to be avoided, remedied or mitigated.

### 30.2 Anticipated Environmental Results

The Electricity Generation Zone is intended to achieve the following anticipated environmental results:

- Efficient operation of the existing hydro electric power generating infrastructure along the Waikato River, including provision for ongoing maintenance, repair and upgrading
- New or additional potentially significant adverse environmental effects arising from hydro electric power generating activities within the core sites are effectively avoided, remedied or mitigated
- Hydro electric power generating activities within the Arapuni core site are undertaken in a manner that recognises and protects the significant historical values associated with the site

- The level of renewable electricity generation in the District and its contribution to the national target for renewable electricity generation is maintained or increased

The Electricity Generation Zone is a method to implement the objectives and policies contained within Chapter 7 (Objectives and Policies for the District's Infrastructure and Development).

## 30.3 Activities

### 30.3.1 Permitted Activities

The following are permitted activities in the Electricity Generation Zone provided they comply with the Performance Standards set out in Rule 30.4 below.

- a) Subject to Rules 14.3 and 14.4 operation, maintenance, repair, replacement, demolition or upgrading of existing hydro electric power generating and National Grid infrastructure, including any associated structures, earthworks, vegetation clearance and access roads or tracks
- b) Ancillary buildings, offices, structures, staff residences, and switch yards associated with hydro electricity generation
- c) Temporary works and associated structures related to electricity generation
- d) New electricity transmission and distribution lines
- e) Visitor facilities associated with energy generation
- f) Recreation and sporting activities on parks and reserves
- g) Carparks
- h) Farming
- i) Forestry
- j) Repair of the Structure of a Built Heritage Feature identified as permitted in the relevant Heritage Inventory Record form in Appendix B
- k) Internal Changes to a Built Heritage Feature identified in Appendix B, carried out in a manner and design and with similar materials and appearance to those originally used.
- ka) Minor works on a built heritage feature listed in Appendix B
- l) Any Re-use/Change of Use of a Built Heritage Feature listed in Appendix B which is otherwise permitted on the site.
- m) Clearance of indigenous vegetation, land disturbance and drainage that is a permitted activity under Rule 14.4.1.

ADVISORY NOTE: The provisions of Section 12 (Temporary Activities) do not apply to temporary works and associated structures related to electricity generation within the Electricity Generation Zone.

### 30.3.2 Controlled Activities

The following are controlled activities in this zone provided they comply with the Performance Standards set out below:

- a) Internal alterations on buildings with identified interiors in Appendix B: Built Heritage Inventory, necessary for the primary purpose of improving structural performance, fire safety or physical access.
- b) External alterations to buildings identified in Appendix B: Built Heritage Inventory, necessary for the primary purpose of improving structural performance, fire safety or physical access.

Specific matters where discretion is reserved are identified in Rule 8.3.1(i) and shall be used when considering a resource consent application for a controlled activity in the zone.

### **30.3.3 Restricted Discretionary Activities**

The following are restricted discretionary activities in the Electricity Generation Zone:

- a) Any activity listed in Rule 30.3.1 that does not conform to the Performance Standards in Rule 30.4.

The specific matters where control is reserved are identified in Rules 8.3.3 and 8.3.4 and shall be used when considering a resource consent application for a restricted discretionary activity in the Electricity Generation zone.

### **30.3.4 Discretionary Activities**

Activities that are not permitted, controlled, restricted discretionary or non-complying will be discretionary activities in the Electricity Generation Zone.

The following are also discretionary activities in the zone:

- a) External additions/alterations, or relocation of, a Built Heritage Feature identified as discretionary in the relevant Heritage Inventory Record form in Appendix B excluding alterations necessary for the primary purpose of improving structural performance , fire safety or physical access.

The assessment criteria contained in Rule 8.4 shall be used when considering a resource consent application for a discretionary activity in the Electricity Generation Zone, with the Performance Standards in Rule 30.4 used as a guide for assessment purposes.

### **30.3.5 Non-Complying Activities**

The following are non-complying activities in the Electricity Generation Zone:

- a) Modifications to, or demolition of, a Built Heritage Feature identified as non-complying in the relevant Heritage Inventory Form in Appendix B.
- b) Clearance of indigenous vegetation, land disturbance and drainage that is a non-complying activity under Rule 14.4.4.

The objectives and policies contained within Chapter 6 (Objectives and Policies for Managing the District's Landscapes and Indigenous Biodiversity) and Chapter 7 (Objectives and Policies for the District's Infrastructure and Development), shall be used when considering a resource consent application for a non-complying activity in the Electricity Generation Zone, with the Performance Standards in Rule 30.4 used as a guide for assessment purposes.

## **30.4 Performance Standards**

The following Performance Standards apply to all activities specified in Rule 30.3.1 (Permitted Activities) or Rule 30.3.2 (Controlled Activities), and to restricted discretionary activities in the zone if granted. Failure to comply with one or more of the performance standards results in that activity being a restricted discretionary activity.

### **30.4.1 Building Setback**

- a) Buildings must be setback 15 metres from all zone boundaries, except where these follow territorial local authority boundaries
- b) There is no building setback required from legal boundaries or from roads within the Electricity Generation Zone.

### **30.4.2 Building Height**

Maximum height - 20 metres, with the exception that the maximum height is unrestricted for:

- a) Temporary drill rigs or other temporary structures, provided the structure is removed within 60 days
- b) Hydro dams and associated penstocks, provided the overall height does not exceed the elevation of the existing dam crest (excluding ancillary buildings and structures on the dam)
- c) Powerhouses, provided the overall height does not exceed the elevation of the existing powerhouse.
- d) Spillway and diversion channel/tunnel structures, provided the overall height does not exceed the elevation of the existing spillway or diversion channel/tunnel structures.

### **30.4.3 Signage**

- a) No sign shall exceed 3m<sup>2</sup> in area, or be more than 3 metres in height. There is no limit on the number of signs per site
- b) Other than traffic signs, all signs must relate to the electric power generating activity within the zone, such as facility signs, safety signs, visitor information signs, and directional signs
- c) Illumination of signs is permitted provided that the illumination is static, with no flashing or other movement
- d) Signs shall not detrimentally affect traffic safety by creating a visual obstruction or by causing confusion to motorists, or reduce or obstruct the visibility of official signs or traffic signals
- e) The owner of a sign shall be responsible for ensuring that it is well maintained.
- f) Signage on the Built Heritage Features listed in the inventory in Appendix B and on the sites where those features are located shall comply with Rule B1 of Appendix B: Built Heritage Inventory.

### **30.4.4 Noise, Vibration and Glare**

Noise, vibration and glare from any activity in the zone shall comply with the provisions of Chapter 15.

### **30.4.5 Parking, Loading and Access**

Provision of on-site car parking, loading spaces and vehicular access shall be in accordance with Chapter 11 Parking, Loading and Access.

### **30.4.6 Dust and Silt Control**

- a) There shall be no dust nuisance beyond the boundary of the site from which the dust is sourced. A dust nuisance will occur if there is visible evidence of suspended solids:
  - i) in the air beyond the boundary of the site, or

- ii) traceable from a dust source on the site settling on the ground, building or structure on a neighbouring site
- b) All silt shall be contained within the site it is sourced, and any stockpiles of loose material shall be contained or maintained in such a manner to prevent silt-laden runoff beyond the boundary of the site (excluding water bodies).

### **30.4.7 Hazardous Substances**

Storage or use of hazardous substances shall comply with Appendix G (Hazardous Substances).

### **30.4.8 Landscape Values**

Activities involving works within outstanding natural landscapes, outstanding natural features or significant amenity landscapes as shown on the planning maps, shall also comply with the performance standards in Rule 14.3. In the event of a conflict between standards in Chapter 30 and Chapter 14 the more onerous provisions will apply.

## **30.5 Other Rules**

The following chapters may also be relevant:

- Chapter 10 (Subdivision) in respect of the subdivision of land
- Chapter 13 (Network Utilities and Infrastructure) in respect of construction and maintenance of network utility structures
- Chapter 16 (Activities on the Surface of the Water) in respect of activities on the surface of the Waikato River.