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## **Submission on the Proposed Waikato Regional Policy Statement**

### **Submitter**

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We wish to receive updates on the process by email only.

We wish to be heard in support of our submission.

We would be prepared to consider a joint case with people making a similar submission.

I confirm that I am authorised to make this submission on behalf of the NZGA.

### **Introduction**

The NZGA is an independent, non-profit association that provides information on geothermal phenomena and utilisation for industry, government and educational organisations. In addition, the NZGA, as a member of the International Geothermal Association, contributes to the international exchange of information within the geothermal development industry. NZGA membership comprises participants, regulators, and interested parties within the geothermal community. It totals 319 members currently.

The Waikato Regional Council RPS will set policy over about 70% of New Zealand's geothermal areas including a large percentage of the high temperature resources most suitable for development. Availability of these renewable energy resources for electricity and energy will be essential to meeting national targets for renewable electricity generation and economic growth. The operative plan successfully balances the requirements for availability for development with a need to protect some regional and inter-regional resources.

The NZGA generally endorses the geothermal parts of the proposed Regional Policy Statement (RPS) and recognises that considerable effort has gone into reviewing and developing the proposed RPS. A wide range of parties worked with the Regional Council to develop the Operative geothermal RPS in 2007. We are pleased that the essence of this operative geothermal RPS has been retained while merging new formats and structure with the wider RPS. We note that a few elements of the Operative RPS have not survived the reformatting and restructure, but will leave other parties to debate the merits of these.

The main points of our submission are:

1. We strongly support the need for a consistent geothermal management approach between those responsible for managing geothermal resources, specifically Environment Waikato and Bay of Plenty Regional Council.
2. Provision needs to be made so that geothermal resources are appropriately protected and can be utilised for multiple purposes such as tourism, energy and electricity development.
3. We endorse the operative/proposed categorisation of separate geothermal systems.
4. We believe that Enhanced Geothermal Systems (EGS) should be accommodated, accordingly provision for the use of EGS in the RPS should be included so that a plan change is not required before a suitable EGS can be used.

We note that in 2010 Environment Waikato and Bay of Plenty Regional Council signed a Memorandum of Understanding to jointly manage the Taupo Volcanic Zone geothermal resources, including greater alignment of geothermal policies and plans, sharing of staff and other in-house resources, and cooperation in environmental monitoring. Given that both organisations are revising their RPSs and are receiving comments this month, it represents an ideal time for the two Councils to align their primary documents with respect to geothermal resources.

## Specific Comments

### Provision 1

Provision or page number: Policy 4.2 Collaborative Approach  
 Other reference: 4.2.7 b: consistent management of geothermal resources across jurisdictional boundaries ... including using memoranda of understanding

#### Support

Submission: It is essential the Environment Waikato and Bay of Plenty Regional Council manage geothermal resources in a consistent manner. We would encourage the use of EW's operative RPS provisions as a sound basis for further development of a consistent approach.

Reasons: Geothermal resources do not recognise boundaries so need to be managed in the same way across boundaries. Because geothermal resources are nationally important it is important that they are managed consistently between regions. We believe that the cooperative work in developing the Operative geothermal Waikato RPS should be the basis for further development by both regions. A similar comment applies to 4.2.4 d).

Decision sought: Retain the section as is.

Retained.

Changes: Nil.

### Provision 2

Provision or page number: Policy 6.6  
 Other reference: 6.6.1 g) recognises the need for electricity generation to be located where sources exist and that transmission infrastructure is necessary to connect these sites

#### Support

Submission: Provision must be made for the development and use of our high quality geothermal energy resources.

Reasons: Geothermal electricity generation and other high value energy uses must be located near to the geothermal resources. To use the electricity nationally, power transmission corridors are essential.

Decision sought: Retain the section as is.

Retained

Changes: Nil.

### Provision 3

Provision or page number: Section 9 Geothermal

Other reference: Policies 9.1, 9.2, 9.3, 9.4, 9.5, 9.6, 9.7, 9.8

Support

Submission: Sustainably managing the region's geothermal resources is very complex, but the implementation methods provide a balanced means of management.

Reasons: Sustainable management of complex systems such as geothermal resources requires consideration of many issues, some of which are near incompatible. The methods proposed under this section and subsequent Policies that deal with each of the field types handle these conflicts well.

Decision sought: Retain the section as is.

Retained

Changes: Nil.

### Provision 4

Provision or page number: Section 9 Geothermal

Other reference: Policy 9.9 (new)

Support with amendment

Submission: Specific allowance should be made for classification of Enhanced Geothermal Systems (EGS)<sup>1</sup>. The NZGA is willing to work with others to develop a suitable section within the RPS. A possible outline is given below.

Reasons: The RPS is intended to look forward 100 years, but a prime current area of geothermal research and development internationally is currently ignored in the RPS. There is evidence that some prime EGS prospects may exist in the Waikato region. Enhanced Geothermal Systems are a valuable potential resource that should be recognized and development should not be unduly hindered by requiring a plan change before any use is possible.

Decision sought: Add a Policy to both classify and enable the use of EGS

Amended as follows

Changes: Add

#### **Policy 9.9 Enhanced Geothermal Systems (EGS)**

Enhanced Geothermal Systems shall be managed in a way that allows sustainable and efficient use and development.

#### **Implementation Methods**

##### **9.9.1 Takes, discharges and other uses in Enhanced Geothermal Systems**

Regional and district plans shall recognize Enhanced Geothermal Systems, and within Enhanced Geothermal Systems:

- a) provide for the continuation of existing small-scale takes of geothermal energy or fluid and associated discharges, providing there are no cumulative adverse effects;
- b) control the establishment of new takes of geothermal energy;
- c) promote the development of Enhanced Geothermal Systems, where appropriate, to increase the range of geothermal energy resources available.

Yours faithfully



Brian White  
Executive Officer  
New Zealand Geothermal Association

<sup>1</sup> In practice, definition will be required and may need to be extended to cover Hot Sedimentary Aquifers (HSAs) as another alternative.