

## **Submission to the Commerce Committee on the Inquiry into the New Zealand Electricity Industry**

### **Introduction**

This submission is in response to a letter from the Commerce Committee, dated 29 April 2003, inviting a submission. The New Zealand Geothermal Association is pleased to have the opportunity to comment, but does not have a consensus view on many of the terms of reference as we represent a diverse group of interests. We wish to comment as follows on two of the items presented in the terms of reference. Both comments could possibly be considered as not directly responding to the terms of reference, but nevertheless cover issues which are important to the outcome of the inquiry:

### **What the electricity generation companies do in order to ensure a balance between hydro and thermal for adequate security in dry years**

We believe that the question asked is too limited. It is not just the balance between hydro and thermal plant that needs to be considered, but also the balance between hydro and geothermal. Geothermal power is unique in that it is the one renewable resource that is unaffected by climate. Geothermal power plants can sustainably achieve very high annual load factors, typically well over 95 %, for many decades. That is much higher than is achieved by thermal plants or most hydro. Hence geothermal provides a practical alternative to using thermal plant for back-up, at a cost which is already comparable to thermal generation, and which may soon be cheaper if gas prices rise as expected.

At present geothermal contributes a little less than 10% of our annual electricity generation. Its potential is much greater than that. Geothermal energy has the potential to make a major contribution to New Zealand's future. Our resources are large (median estimate of 3,600 MW of electrical generation, Lawless 2002) and only about 10 % has been developed so far, mainly for electricity generation.

### **What further reforms to the regulatory regime are needed.**

We suspect that this question may have been intended to focus only on changes to the regulations directly governing electricity generation and distribution. However the biggest obstacle to achieving reliable, sustainable electricity supply from a renewable source is considered to be the Resource Management Act.

Geothermal energy could provide:

- Domestic or industrial direct heat and electricity at a reasonable cost and low environmental impact, if properly managed.
- Lower greenhouse gas emissions than energy based on fossil fuels.
- Security of energy supply in times of drought.

- Replacement for the expected reduction in natural gas production in the near future as the Maui field is depleted.
- A large proportion of the growth in renewable energy targeted for 2012 by the Government.
- A large proportion of the projected growth in electricity demand over the next decade, which presently-committed projects are not sufficient to supply.
- Regional development, as geothermal plants are built where the resource is found.
- Iwi development, as three out of the four most recent geothermal developments in this country have been wholly or partially in Maori ownership.

However, few of these goals will be easily achievable under the RMA procedures as they are currently applied. The NZGA considers that the following changes are needed. These fall into two categories: activities which could be done now, without any changes to the legislation; and activities which would require the legislation to be amended.

### **Activities Already Achievable Without Changes to the Act**

1. **Clear direction on the balancing between local, regional and national interests.** This could be done by a National Policy Statement which gave direction to local decision-makers on how to take into account whether a geothermal energy project was in the national interest, through advantages such as lessening greenhouse gas emissions, increasing our percentage of renewable energy, and balancing those against any local disadvantages.

2. **Clear direction on the issue of sustainability.** The issue of sustainability has not been consistently treated in decisions on resource consents for geothermal energy, or Regional Plans under the RMA. The NZGA is prepared to take the lead on formulating an appropriate definition of sustainability in terms of the RMA, and we believe that there is sufficient guidance in the Act to do this in a robust way. To give this some effective weight, though, it would be a great advantage to have this also defined in a National Policy Statement.

Either of the two previous issues could equally well be addressed by an analysis and statement from the Parliamentary Commissioner for the Environment, as a first step.

3. **The calling in of projects.** Where large or significant geothermal projects are proposed, there could be advantages in having the project “called in” by the Minister, to speed up and facilitate the process. However, we see this as only an alternative mechanism to being able to refer cases directly to the Environment Court, which would generally be better as described below.

4. **Greater input from Central Government agencies.** At present no one is presenting the national environmental or economic benefits which can result from new renewable energy projects. It would be appropriate for agencies such as Ministry for the Environment, EECA and probably Ministry of Economic Development to be submitters in support of resource consent applications for renewable energy projects. Pragmatically, this would also enable the agencies concerned to become aware of the issues in a practical, hands-on fashion. It would be dependent on the agencies taking a much more pro-active role than they have in the past.

5. **Stricter enforcement of the statutory timetable** for responses from consent authorities.

6. **More resources for the Environment Court.** The delays in getting a hearing before the Environment Court are unacceptable.

7. **Better resourcing for consent authorities on technical issues.** Geothermal issues require specialised resource management technical skills which are not generally within the knowledge base of most regional & district councils. Consent authorities routinely pose numerous requests for more information on proposed geothermal projects under Sections 91 and 92 of the Act, which can lead to long delays. If Councils had the resources to maintain better in-house expertise, or more resources for access to external consultants, some of these delays could be avoided.
8. **Establishment of robust, peer-reviewed, standard limits, guidelines or criteria** for air and water quality and noise that can readily be translated into consent conditions for geothermal projects. Some progress has recently been made in this regard, e.g. with the latest air quality guidelines, but it is still far from complete.
9. **Establishment of robust, peer-reviewed, standard templates for geothermal resource consent conditions.** While every project is in some way unique and there is always a need for some site-specific conditions, many of the issues are common to all projects and standard default conditions on management and monitoring would save time in the consent process, help to limit compliance costs, assist consent authorities who have to process only a few geothermal resource consents (such as Northland Regional Council) and give a greater degree of certainty to developers. It is unrealistic to expect the consent authorities to do this for themselves - they have shown little interest in doing so for the 11 years the Act has been operating, and consents for geothermal projects have had little consistency. It would be better to have an initiative from an outside agency such as the Ministry for the Environment.

#### **Activities Which Will Require Changes to the Act**

10. **The ability to request resource consent applications be taken directly to the Environment Court.** For large geothermal projects, especially those in inhabited or sensitive areas, it is obvious that whatever the outcome of the initial hearing, either the project proponents or the objectors will appeal to the Environment Court. This will inevitably cause delays of at least a year and quite likely 2 –3 years and at least double the cost of the consenting process both for the applicant and submitters. Such delays and additional cost are in the interest neither of the developers, nor of those who may object because of genuine concerns over the environment, nor the consent authorities. If a developer were able to request direct reference to the Environment Court in this instance it would be to the advantage of all concerned. An alternative would be to severely limit grounds on which appeals could be taken to the Environment Court, but for that to be credible the capabilities and expertise of Tribunals and Commissioners at the regional level would have to be improved.
11. **Extension of the maximum term of resource consents to more than 35 years,** to give commercial certainty, in the case of capital intensive renewable energy projects with minor and predictable effects.
12. **Establish a independent consent authority with powers and responsibilities intermediate between Regional and Central Government.** In his way a better balance could be established between national and regional interests and any suggestion of local politics influencing decisions would be avoided.
13. **Reduce the opportunities for frivolous objections by:**
  - (a) Requiring objectors to demonstrate standing.
  - (b) Ensure objectors are fully liable for costs.
  - (c) Making the criteria for legal aid for objectors more stringent.

- (d) Remove lack of consultation as grounds for an appeal (though it should remain legitimate grounds for an objection). Appropriate 'deemed to comply' standards could be developed to provide guidance.

A similar situation prevails with most other forms of renewable energy, including wind, hydro and biomass, and to access for transmission lines.

The New Zealand Geothermal Association wishes to continue to be involved in the consultation process. We do not necessarily wish to appear before the Committee but would be pleased to meet with you if you so request and to provide any more information and supporting documents that you may require.

### **References**

Lawless, J V; 2002: New Zealand's geothermal resource revisited. New Zealand Geothermal Association Annual Seminar, Taupo.