IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of applications submitted by New Zealand Energy Limited for a change or cancellation of conditions to existing resource consents 101987/1, 101990/1, 101991/1, 101992/2, 101993/1, 102264/1 and for new Land Use Consents 104088 and 104089, new Water Permits 104090 and 104091 and new Discharge Permits 106031, 106032 and 106033, all relating to the Raetihi Hydro Electric Power Scheme, Raetihi.

ANNE-MARIE WESTCOTT - RUAPEHU DISTRICT COUNCIL

INTRODUCTION

My name is Anne-Marie Westcott. I hold the position of Environmental Manager with Ruapehu District Council (RDC).

I hold the degree of Bachelor of Science (Zoology) from Massey University and a Masters in Business Administration with Southern Cross University.

I was employed by RDC to manage the solid waste service and implement waste minimisation in June 2003, and in June 2006 the portfolio was expanded to include the Council's water services assets. Previously I had been employed by Horizons Regional Council and its predecessors for a period of 12 years undertaking work in the Water Quality, Ecology and Compliance Fields.

I confirm that I have read the Code of Conduct for expert witnesses contained in the Environment Court Practice Note, and I agree to comply with it. I confirm that I have considered all of the material facts that I am aware that might alter or detract from the opinions expressed here.

The evidence I am about to give is within my area of expertise and represents my best knowledge about this matter. To my knowledge, I have not omitted any material facts that might alter or detract from the opinion expressed here.

SCOPE OF EVIDENCE

1 Introduction

1.1 This report refers to matters which relate to the resource consents sought by the applicant to increase the rate that water can be abstracted from the Makotuku River and Makara Stream at a combined volume of 1,100l/s. In addition an increase in minimum flow from the Makaraiti from 5 l/s to 10 l/s all year round. The original application was made back in 2009 and with additional applications made in 2011 and as recent as 11 October 2013 there have been a number of modifications. With the recent diesel event consuming RDC resources a detailed analysis of the additional information has not been possible. RDC understands that since the initial report there have been modifications to the abstraction methodology and site locations. However this does not change the overall premise of our submission. RDC still hold that the applicant has failed to demonstrate how the Resource Management Act 1991 Part 2 has been met. Specifically:

- Section 5 in relation to the promoting the sustainable management of natural and physical resources;
- Section 6 matters of national importance
- Section 7 in relation to the efficient use of natural and physical resources, the maintenance and enhancement of the amenity values and the intrinsic values of the ecosystems.

1.2 RDC is a representative body of all its ratepayers and holds a role of ensuring the balance is maintained across the community. Sustainability is assessed using the four wellbeings: social, economic, environmental and cultural. Historical decisions around infrastructure affect the four wellbeings of our community, and any change requires a level of certainty and lead in time to be economically viable for the community.

1.3 RDC believes the delivery of infrastructure enables communities to maintain public health and provide for businesses as essential services for the public good. Energy, water supply, wastewater treatment and stormwater drainage are all components of the infrastructure equation. These formulate the reasonable needs of a community. This is acknowledged in the Proposed One Plan Chapter 3 Infrastructure, Energy, Waste and Hazardous Substances and Contaminated Land objective 3-1 which requires infrastructure and energy to be considered of national importance. This is also reiterated within Policy 3-1 which identifies:

Policy 3-1 Benefits of infrastructure and other physical resources of regional or national importance

(a) The Regional Council and Territorial Authorities must recognise the following infrastructure as being physical resources of regional or national importance:

(i) Facilities for the generation more than 1 MW of electricity and its supporting infrastructure where the electricity generated is supplied to the electrical distribution and transmission networks (vii) public or community sewage treatment plants and associated reticulation and disposal systems
(viii) public water supply intakes, treatment plants and distribution systems
(ix) public or community drainage systems, including stormwater systems

1.4 The list of infrastructure does not have any hieratical bases to provide ranking of importance. The applicant has only acknowledged the Raetihi Water Supply in its consideration of water allocation from the Makotuku Stream. There is no acknowledgement of the wastewater treatment, and drainage systems which are also intrinsically linked to the community needs.

1.5 The wastewater treatment plant and a series of public and community drainage systems within the township of Raetihi which utilise the natural water systems to disperse and dilute concentrated contaminants which are both natural and man-made. The effect of abstraction of more volume from the greater Makotuku Catchment has not been addressed by the applicant. RDC would suggest this effect would be more than minor in nature.

1.6 Part of a community's **social wellbeing** is the amenity value of the town. This starts with the small things: flowers in the garden, maintained lawns and infrastructure able to meet the community's needs. Vibrant towns stimulate growth by inviting families, visitors and industries to join the community. One of the attractions of joining a town is the ability to join to infrastructure.

1.7 Assessment of resource use is part of RDC's role in ensuring the community are provided an appropriate district to live, work and play. Section three sets out Actual and Potential Effects on the Environment within which our community is encompassed and provides an understanding of issues, options and opportunities**.** The applicant has provided very limited information and has not addressed how the environment may be affected with its proposed increase in abstraction levels.

2 Loss of Water Volume in the Makotuku Catchment

2.1 RDC represents the Raetihi Community, including those living in the rural area and residents of the township. Water in the Makotuku River catchment system is used for water supply, stock water, industrial abstraction, irrigation, contact recreation, fishery, and helps to maintain healthy aquatic life. The catchment has strong cultural links making its Mauri, aesthetics and amenity important in the district. The rivers and streams assimilation capacity is also important at the land-use interface points.

2.2 In particular the effects on each of the water bodies: Makara Stream, Makaraiti and the unnamed tributary of the Mangaone Stream which flow into the Makotuku River Catchment have not been considered in detail. Please refer to Appendix, Map 1.

2.3 Hydroelectric power schemes do not create significant adverse effects when confined to a single catchment as the water is returned to the river system. In this case the applicant intends to take water from four water bodies and discharge into the Orautoha Stream, a tributary of the Manganui o te Ao River which forms part of the Whanganui River Catchment. Please refer to Appendix, Map 2.

2.4 Flow Variability

2.4.1 Water abstracted from the four water bodies is lost to the ecosystem of that waterway. Resulting in lower **flow variability** required for the vitality of ecosystems. I would refer to Mr Brown's report which provides details around the essential need for flow variability for periphyton growth, aquatic life and sediment movement.

2.4.2 The loss of any water volume, particularly to outside the Mokutuku River Catchment is of concern as the majority of the time Mountain Streams are very stable. The rise and fall from any rainfall event is very rapid and a base level is again quickly established. Freshes are of short duration with minimum opportunity to abrade the bed of the river.

2.4.3 Summer growths of algae can be tracked from throughout the bed of the river and are not found just below the Raetihi Wastewater Treatment Plant but up above the plant, as high as the Horopito crossing. These observations made by myself over the last two years. The riparian margins are limited and this is reflected in the evidence of Mr Brown's Table 4 which show a progressive increase in *E. coli* and SIN down the catchment. The phosphorous levels across the Ruapehu District are constantly higher than the One Plan target value.

2.4.4 RDC is also a downstream user of the Makotuku River with its wastewater treatment plant being located below the Raetihi township. Further degradation and removal of water flow will have an adverse effect on the ratepayers of the Ruapehu District. The removal of water from its natural ecosystem reduces flow variability as discussed but also it reduces the volume of water available to enable natural assimilation of the discharged treated wastewater. In effect it increases the need for additional treatment which must be funded by the ratepayer with a declining population base in a low economic community.

2.4.5 Reducing volume may raise the water temperature which can affect the growth of aquatic plants, the diurnal Dissolved Oxygen curves and general health of the ecosystem.

2.5 Sustainable Use of the Water

Policy 3-3: Adverse effects of infrastructure and other physical resources of regional or national importance on the environment

In managing any adverse environmental effects arising from the establishment, operation, maintenance and upgrading of infrastructure or other physical resources of regional or national importance, the Regional Council and Territorial Authorities must:

(c) avoid, remedy or mitigate more than minor adverse effects arising from the establishment of new infrastructure and other physical resources of regional or national importance, taking into account:

(i) the need for the infrastructure or other physical resources of regional or national importance,

(ii) any functional, operational or technical constraints that require infrastructure or other physical resources of regional or national importance to be located or designed in the manner proposed,

(iii) whether there are any reasonably practicable alternative locations or designs, and

(iv) whether any more than minor adverse effects that cannot be adequately avoided, remedied or mitigated by services or works can be appropriately offset, including through the use of financial contributions.

2.5.1 The applicant has not demonstrated that efficiency is being achieved using the current allocated water. Increasing the abstraction will not make the facility any more efficient.

2.5.2 RDC does not wish to disadvantage any ratepayer from their operations but is required to balance the needs of the constituents that it represents. RDC feels that the applicant could achieve some it its goals by undertaking works within the facility first before seeking to impact more on the environment.

2.5.3 The water abstracted from the Makotuku River flows through a channel, gathering water from the Makara Stream along its way. This channel has been observed to have limited maintenance and loses some of the water it is conducting to the power scheme. The applicant has provided limited information around the efficiency of the channel and its ability to conduct the flow volumes currently proposed. Mr Till's evidence will cover sustainability in more detail.

2.6 Risk Across Catchments

2.6.1 The power scheme discharges into the Orautoha Stream which is a tributary of the Manganui o te Ao. The applicant's submission does not provide information around the potential effects of moving significant volumes of water from quite open and potentially vulnerable catchments into a more isolated catchment recognised by a water conservation order. There is no assessment of sediment transfer other than the applicant's comments that it is from other land use practises. Nor does it consider contaminant or pest transfer into the sites of significance which are protected by the conservation order.

2.6.2 RDC also seeks that the gates on any catchment are able to be sealed to reduce the possibility of continued cross contamination from the channel. This was demonstrated during the diesel spill where alternative water sources for farmers and RDC were contaminated.

2.6.3 The National Water Conservation (Manganui o te Ao River) Order 1989 sets out the outstanding Characteristics and Features of the River which include:

- wild and scenic characteristics,
- wildlife habitat for the blue duck
- outstanding recreational fishery

2.6.4 Due to these characteristics and features the Order seeks the retention of the natural waters in their natural state, sets a rate of flow, that a right to dam not be granted and a restriction on water rights including discharges.

2.6.5 The applicant has not provided information around the risk to this water body or how the natural state of the waters are maintained with the increasing abstraction from one catchment which is then added to another.

2.7 RDC Current Water Abstraction and Future Changes

2.7.1 Ruapehu District Council currently holds a resource consent to abstract from the Makotuku River:

- 1,685 m^3/d when flows exceed 115 l/s at a maximum abstraction rate 20l/s
- 820 m^3/d when flows are less than 115 l/s at a maximum abstraction rate 10l/s

2.7.2 Emergency Consent Makara Stream

- 1,000 m^3/d (between 7am and 7pm) each day

3 Summary

3.1 There appears to be no information to allow a balanced view to be drawn around the Resource Management Act specifically in relation to the Purpose and Principles of the Act, including matters raised by Section 5, which promotes the sustainable management of natural and physical resources, Section 6 matters of national importance and Section 7 in relation to the efficient use of natural and physical resources, maintenance and enhancement of the amenity values and the intrinsic values of the ecosystems.

3.2 The applicant has not provided information around the impact of removing additional water from the Makotuku Catchment from other stream users, the risk it proposes in moving water from one catchment into another, or how the natural state of the waters are maintained with the increasing abstraction from one catchment to another. RDC believes there are opportunities for efficiency to be gained from the current water resource abstracted to meet the needs of energy as national important without the need to abstract further water.

3.3 As such RDC requests that the resource consent applications as submitted by New Zealand Energy Limited be declined.