Submission to an application for resource consent under section 96 of the Resource Management Act 1991

To: Waitomo District Council

Name: Ministry of Economic Development

Address: P.O. Box 1473, Wellington.

1. **The Ministry of Economic Development (MED) supports the application of King Country Energy Limited for resource consent, in so far as it contributes to national energy objectives, to enable it to install and use a hydro electricity power station on the Mokau River referred to as the Mokau Hydro Electric Power Scheme.**

2. **The particular parts of the application MED supports are:**

The whole of the application.

3. **The reasons for making this submission are:**

The Mokau Hydro Electric Power Scheme is well aligned with the government's objectives, particularly the energy objectives to deliver security of supply with an increasing focus on renewable energy sources.

Hydro Energy in New Zealand

Hydroelectric generation currently accounts for approximately 60% of New Zealand's electricity generation. While the scope for new hydro developments on the scale of those built in the past is limited, hydro generation is likely to continue expanding by way of small to micro developments[1].

Contribution to Government's Policies and Objectives

As stated above, the proposed Mokau Hydro Electric Power Scheme contributes to the government's stated objectives for the energy sector (energy efficiency and security of supply with an increasing focus on renewables) and is consistent with the principles for sustainable development.

Security of Supply

Ensuring security of electricity supply is a critical issue for all New Zealanders and for the government. It is imperative to ensure that New Zealand has the generation capacity over the long term to meet the projected growth in energy demand.

The most recent *Energy Outlook* provided by the Ministry of Economic Development projects that the composition of New Zealand's energy supply and demand will change as the demand for energy increases, the Maui gas field declines and new technologies for the production, delivery and use of energy become more

[1] New Zealand Government, *Sustainable Energy: Creating a Sustainable Energy System,* October 2004.

economically viable. It should be noted that several developments since 2003 mean that some of the Outlook's predictions, particularly of the supply side, are dated. In particular, the Outlook included Project Aqua, which would have delayed the need for more generation. Since the Outlook's publication, Meridian Energy Limited has announced that Project Aqua will not proceed.

The Energy Outlook considers a range of scenarios, all of which predict increased electricity demand, ranging from an average of 1.2 percent per annum to 1.8 percent per annum over the period to 2025[2]. There is some evidence to suggest that in the shorter term, increases in demand may be higher than these figures. Analysis of Grid Exit Point data from 1999 indicates that electricity demand is currently increasing in the range of 2 to 2.5 percent on average per annum.

It is important that, as the means become available, New Zealand undertakes the transition to renewable energy sources to ensure that we have the capacity to accommodate the growth in demand and to compensate for the inevitable decline in the availability of indigenous gas. The Mokau Hydro Electric Power Scheme would contribute to the increased generation capacity required to satisfy demand while at the same time reducing New Zealand's dependence on non-renewable energy sources.

Sustainable Development Programme of Action for Energy

The Sustainable Development Programme of Action is one of the Government's major over arching documents designed to guide and underpin policy development. Energy has been identified as one of the target areas for sustainable development because of its correlation to economic growth, potential environmental impact, and because both consumers and businesses are heavily reliant on its supply.

The major objective of the programme of action for energy is to ensure continued delivery of energy services to New Zealanders. It acknowledges that renewable energy sources will become increasingly important in providing security of supply and in mitigating harmful effects that energy use can have on the environment.

A sustainable energy discussion document, which establishes a policy framework within which energy choices can be considered going forward, was released on the 27th of October 2004. The document states that sustainable energy must be:

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[2] Ministry of Economic Development, *Energy Outlook to 2025*, October 2003.

Assumptions of the Energy Outlook's Reference Scenario:

- 2.5% p.a. GDP growth from 2007
- Oil prices rising from US$20/bbl in 2004 to US$25/bbl by 2020 and constant thereafter
- Constant exchange rate of NZ$1.00 = US$0.50 out to 2025
- Pohokura gas available from 2007 and Kupe from 2008
- New gas available from discoveries averaging 35 PJ p.a. for 2011-2013 and 60 PJ p.a. from 2014 onwards
- North Island delivered coal prices at $3.59/GJ in 2004 and at $4.00/GJ from 2013 onwards and South Island delivered coal prices about $3.00/GJ
- As a result of the National Energy and Efficiency and Conservation Strategy, additional energy efficiency uptake above the normal rate of 0.5% p.a. for 2002-2005, 1.0% p.a. for 2006-2015 and 0.5% p.a. for 2016-2025
- Forest industry growth, with the harvest rate increasing from 19 Mm^3 in 2001 to 33 Mm^3 in 2025 and the total amount processes increasing from 13 Mm^3 in 2001 to 19 Mm^3 in 2025.

a) reliable and resilient;

b) environmentally responsible; and

c) efficiently and fairly priced.

The discussion document acknowledges that New Zealand still has extensive untapped renewable energy resources and that while few options remain for large new hydro projects, hydro generation is likely to continue expanding by way of small to micro developments.

There are a number of specific energy and energy and energy-related policies and strategies that contribute to sustainable energy objectives, including the National Energy Efficiency and Conservation Strategy, the climate change initiatives and the Government Policy Statement on Electricity Governance. The Mokau Hydro Electric Power Scheme is consistent with the actions outlined in these documents.

National Energy Efficiency and Conservation Strategy

The National Energy Efficiency and Conservation Strategy (NEECS) is the government's primary means to achieve outcomes sought in the sustainable development programme of action. The purpose of the NEECS is to facilitate the move towards a sustainable energy future for New Zealand by promoting energy efficiency, conservation, and a transition to the use of renewable energy sources.

The NEECS identifies two key policy directions that support New Zealand's movement towards a sustainable energy economy.

a) Ongoing improvement in our energy efficiency

Target: By 2012, energy efficiency throughout the economy will improve by at least 20 percent. This target is equivalent to a continual improvement rate of two percent per annum to 2012.

b) Progressive transition to renewable sources of energy

Target: By 2012, renewable energy sources will generate an additional 30PJ of energy above 2000 levels. In 2000, renewable energy sources provided 133.5PJ, or 29% of consumer energy. The target means that by 2012, renewable sources should generate a minimum of 163.5PJ of consumer energy, which would equate to approximately a 30-35% market share.

It is estimated that the Mokau Hydro Electric Power Scheme will generate an average of 44 gigawatt hours of electricity per year, or 0.158 petajoules, which is approximately 0.53% of the renewable target.

Government Policy Statement on Electricity Governance

The Government's overall objective for the electricity industry is to ensure that electricity is delivered in an efficient, fair, reliable and environmentally sustainable manner to all classes of consumer.

The government has identified a number of desired outcomes consistent with the above objective. The King Country Energy proposal would particularly contribute to achieving the following outcomes:

a) the electricity sector contributes to achieving the government's climate change objectives by minimising hydro spill, efficiently managing transmission losses and constraints, promoting demand-side participation and energy efficiency and removing barriers to investment in new generation technologies, renewables and distributed generation; and

b) risks relating to security of supply are properly managed.

Resource Management (Energy and Climate Change) Amendment Act 2004

The Resource Management (Energy and Climate Change) Amendment Act 2004 has recently been passed by parliament. It seeks greater alignment between local government plans and national energy objectives, outlined in the NEECS and climate change policies, and aims to ensure that councils consider the contribution their regions can make to meeting New Zealand's commitments under the Kyoto Protocol.

Specifically the Act has amended section 7 (other matters) of the RMA to require decision-makers to have particular regard to the efficient use of energy, the effects of climate change, and the benefits associated with the use and development of renewable sources of energy.

Climate Change Policy

Hydro energy, as with other renewable energy sources, is an environmentally responsible alternative to energy derived from fossil fuels because generation does not produce carbon dioxide. Carbon dioxide emissions could be significantly reduced if the potential of renewable energy was fully exploited. By contributing to the reduction of greenhouse gases, the Mokau Hydro Electric Power Scheme would assist New Zealand in meeting its commitments under the Kyoto Protocol.

4. The Ministry of Economic Development requests that the consent authority make the following decision:

Approve the application for resource consent.

5. The Ministry of Economic Development does not wish to be heard.

David Smol
Deputy Secretary
Resources and Networks Branch
Ministry of Economic Development

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Attention: Stuart Calman