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Hon Grant Robertson
Minister of Finance
Parliament Buildings
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By email: g.robertson@ministers.govt.nz

Dear Minister,

A Briefing for the Incoming Minister

Congratulations on your appointment as Minister of Finance. As Genesis' shareholding Minister you are coming into the role at a dynamic time in the energy sector as it rapidly evolves to meet the changing needs of consumers while embracing new ways of thinking. From the integration of new technology-enabled products and services into a traditional industry, through to the continuing transition of our already highly renewable electricity system to support a low-emission environment, this is an exciting time.

Delivering the best outcomes for New Zealanders

Our priority must be ensuring the energy sector has the ability to offer optimal outcomes for consumers. Making sure New Zealanders have the best energy tools available to do everything from running their businesses, to heating their homes in the most effective and efficient way possible. For Genesis, this means that everyone has choice, comfort and control over their energy consumption.

As New Zealand's largest retailer of electricity and gas we have a clear vision for the future of energy management that is already delivering more value to customers than ever before. This focus has led us to develop a real-world energy community based in Martinborough. Using the latest technologies, both hardware and software, we are working with the community to test and learn what really makes a difference to New Zealanders. The project is called the Local Energy Project (LEP).

While the LEP is assisting in the delivery of meaningful customer-focussed offerings, what it has also brought into sharp focus is that our current regulatory frameworks did not envisage the customer-centric approach required today. The historical 'network first' approach to delivering services needs serious attention: if left unchecked it has the real potential of driving sub-optimal outcomes for customers by constraining the competition, pace, innovation and development we all desire.

Delivering for Shareholders

As Genesis' business continues to grow through innovative offerings and diversification, combined with increased discipline in capital expenditure and improved efficiencies Genesis has continued to grow its dividend.

Since listing the Mixed Ownership Model energy companies have provided significant benefits to both consumers and to shareholders with dividends to the crown increasing by 39 per cent. This increase

has been most stark for Genesis, where the Crown's 51 per cent ownership of the company has seen it receive more than twice as much in dividends now (around \$84 million a year) than it did in the best year before the MOM (\$39.1 million in 2009/2010). This is an outstanding achievement and will require a strong balance sheet to ensure the growth momentum is sustained.

Transitioning to a low emissions economy

Genesis understands the need for, and is supportive of, establishing emission targets for the industry that reduce emissions while ensuring that the lights stay on for New Zealanders. New Zealand already has a very unique energy environment when compared internationally, with 85 per cent of electricity generation already coming from renewable sources, the third highest in the OECD. As with any complex sector there are many interdependencies, and in a system as weather reliant as ours, the next steps in our transition to lower emissions must take a pragmatic approach to avoid unintentional consequences and maximise results for consumers.

Genesis is the largest supplier of electricity and gas to New Zealanders, and the owner of substantial generation assets that we operate responsibly within the many environments and communities in which we operate. As this new Government pivots into its new leadership role, I look forward to working with you to create a blueprint to manage this transition in an orderly and planned way. There are challenges, which we have been considering for some time, to ensure that New Zealand can continue on its journey to a lower emission economy. To assist this transition, we believe it is necessary to:

- Ensure the tensions and trade-offs are widely understood by all and considered deeply through the energy tri-lemma lens (providing reliable, affordable and environmentally sustainable energy);
- Enable more clarity in the National Policy Statement for Renewable Electricity Generation;
- Protect the integrity of operating licences for renewable energy assets ensuring they can deliver the generation volumes required to achieve a low emissions economy; and
- Look to encapsulate transportation emissions in a future discussion on reducing energy emissions through the increased uptake of electric vehicles.

As you commence your stewardship of this important Ministerial portfolio you will, undoubtedly, be identifying areas where the energy sector could adapt, and, in doing so, contribute to the economic and social objectives of the Government. Navigating how to enable competition to thrive in emerging technology markets for the benefit of all consumers and ensuring there is a diverse mix of electricity generation to keep businesses running and homes warm all year round will require deliberate, thoughtful direction.

Enclosed is a short briefing to help inform you about us, and some areas we consider to be a key priority to address during your time in office. We are a business that is innovating. We want to make a positive impact for all New Zealanders and work with you to make this a reality. We look forward to working constructively with you. Should you or your officials have any questions, please do not hesitate to contact me at marc.england@genesisenenergy.co.nz.

Yours sincerely



Marc England
Chief Executive

Briefing for the Incoming Minister of Finance

Who are we?

Genesis has a significant footprint in the energy sector. We are the country's largest gas and electricity retailer, a significant shareholder in the Kupe oil and gas field, and owner of wind, hydro and thermal generation assets across both islands.

Genesis is New Zealand's largest thermal generator as owner of the Huntly power station. This sees us play a key role in maintaining the reliable supply of electricity to New Zealand communities and businesses during hard times of weather variability, particularly in 'dry' periods when hydro lake storage is low. New Zealand's high reliance on hydro generation (50-60 per cent of supply) comes with relatively low water storage, at circa 10 per cent of hydro demand, compared to other large hydro markets like Norway. This, in effect, makes flexible thermal generation an enabler of seasonal and weather dependant hydro generation.

While we are beneficiaries of assets created with foresight and innovation, such as the engineering feat that is the Tongariro hydro power scheme, we are proud to carry on this tradition of innovation and refuse to be complacent: we are embracing the technologies that are driving today's change to ensure we provide the best options for our customers tomorrow.

With this in mind, Genesis has undergone a strategic shift in thinking in the last 18 months. We are on a mission to reimagine energy with customers at the forefront. '*Reimagining energy*' to put control in our customers' hands' is the internal purpose our circa 1000 employees are motivated by. This focus will deliver new products, new services and new ways of engaging with energy. Our objective is to give customers the convenience, control and comfort they want in their lives as we head toward our vision of becoming New Zealanders' first choice for energy management.

To-date, we have achieved a number of key milestones in support of this vision, including development of the Local Energy Project (LEP) in the South Wairarapa. The LEP consists of solar, battery and electric vehicle (EV) installations at homes and businesses throughout the community that are assisting us to understand how people want to use and manage energy, from which we can develop products and services that will deliver customers value.

Leveraging the opportunities of emerging technologies

Emerging technologies have driven phenomenal change across many industries including transport, broadcasting, finance and health where, in response, new business and revenue models are driving more value for customers through increased service and product offerings. This is the age of convergence where traditional boundaries between sectors are blurred and redefined¹.

The electricity sector is also undergoing unprecedented change as new ways of generating, consuming and storing energy challenge traditional sector participants to think beyond monopoly ownership of poles and wires and consider how to engage with the competitive market to ensure customers and their interests are put at the heart of our energy market.

We see the three areas outlined below as being critical to best leveraging emerging technologies and delivering a range of new services and products for customers. They are interdependent issues and, when addressed together, will lead to a thriving and competitive electricity market that all New Zealanders can access and benefit from:

Balancing data access and protection – balancing access to, and protection of, data is important, and something regulators and market participants must now agree upon. As data is collected and used to develop services, clarification of where and when data is shared with third parties, with or without explicit customer approval, will be critical to enabling innovative development of services and products. It will also be crucial in maintaining trust in the sector to collect and use data, and a social licence to

¹ For example, the blurring has occurred with telecommunications and broadcasting, technology and public transport, 'mobility as a service' and the rise of the sharing economy.

continue to operate and innovate for the benefit of our customers; essential dynamics of a thriving competitive market.

Enabling emerging technology – electricity distribution businesses (EDBs) are also part of the electricity sector's transition. While the 29 EDBs move at different paces, it is essential they develop and deliver an innovative and efficient network in co-operation with retailers to enable the best results for consumers. As emerging technologies become a significant focus for the sector, the blurring of boundaries between an EDB's regulated business innovating and their unregulated business leveraging off their regulated business to expand, without any restraint, into the competitive market is a significant concern. We believe a structural separation of these natural monopolies between their regulated and unregulated businesses will allow for improved focus on regulated activities while creating a more effective, transparent and competitive market in which their separated businesses can equally participate. Addressing this now will create a pathway to deliver a thriving market that will ultimately benefit all consumers.

Market structure simplification and regulatory agility – having a thriving and competitive market place that adapts to new developments and emerging technologies quickly can only truly be achieved by the creation of a simplified distribution network, through either a reduction in the number of EDBs or greater standardisation across them, such as with Local Government entities or District Health Boards, to obtain greater efficiencies across the networks. We encourage you to include transformation of the existing distribution framework as a priority step in laying the foundations for the sector to maximise the opportunities in the new energy environment.

Delivering on our promise to reimagine energy

Genesis wants to see a fit for purpose regulatory regime for emerging technologies because we are gaining first-hand insights into how these can deliver real value for New Zealanders.

Our LEP is scheduled to run for up to three years following its launch in March 2017, enabling long term assessment of how residential, business and the agricultural sectors use, adapt to and embrace new technologies.

We have created this project to learn quickly what works for customers and what doesn't as a practical way to go beyond the theory and discuss what is needed for New Zealand to capture the full benefits of emerging technologies. The feedback continues to be very positive and as the project progresses we continue to learn and respond.

Genesis is also evolving our approach to the School-gen programme, preparing to expand it to more schools and Kiwi kids as the new academic year starts in February. The school-gen programme has been in operation for a decade and has installed solar on 92 schools across New Zealand. Through our involvement with these schools Genesis has gained a wealth of experience and knowledge, while providing the opportunity for young New Zealanders to learn about energy, energy efficiency and sustainability. The schools' solar panels combined produced 489 MWh of electricity last year, making Genesis energy one of the largest solar providers in New Zealand.

School-gen has always spoken to the idea of reimagining energy, and the programme supports the sort of STEM-based learning and leadership that is important for the progress of "NZ Inc" – an objective in which we all have a stake. As we expand the programme early next year we hope to reach many more schools with curriculum-aligned modules that are relevant to this aim.

Keeping New Zealand powered on while transitioning to a low-emissions economy

The World Energy Council's framework of the energy tri-lemma (tri-lemma) is a triple challenge of providing reliable, affordable and environmentally sustainable energy. The tri-lemma acknowledges there are tensions and trade-offs between the three elements that need to be made for a country's social and economic prosperity to progress and develop. We consider this is an important context within which to approach your Government's desire to transition to a low-emissions economy, and is an important touchpoint for Genesis as the country's largest thermal generator.

New Zealand's electricity generation has become increasingly renewable, with ongoing investment in renewable technologies and the retirement of redundant thermal plant enabling New Zealand's share of renewables for electricity generation to grow to the third highest in the OECD at approximately 85 per cent. Genesis has reduced its own emissions from thermal generation by over 74 per cent in the past 10 years and electricity generation from all producers is now responsible for just five per cent of New Zealand's total greenhouse gas emissions.

These are outstanding achievements on the global stage and a big tick in respect of the 'environmentally sustainable' requirement of the tri-lemma. Genesis is proud of the sector's achievements and is committed to contributing to further reducing emissions through the ongoing optimisation of generation assets and adoption of new technologies with the subtlety that the benefits of new technologies and the path to lower-emissions is considered in the context of overall benefits to New Zealand consumers.

We are also mindful of the Government's goal to transition to 100 per cent renewable energy by 2035 in a year of average hydrology. We believe this goal needs to be considered carefully so that the transition does not put unnecessary cost burdens onto consumers and businesses and that New Zealand transitions in an orderly, cost effective way while remaining globally competitive.

Outside the electricity generation sector, we believe New Zealand's best opportunity at having a meaningful impact on emissions is in the electrification of transport. There is no better way to leverage our 85 per cent renewable electricity system than through the migration away from fossil fuel transport. The challenge for New Zealand is that, given we are a relatively small market, we are not at the front of the queue for new model roll-outs as manufacturers bring new EV models to market.

In a recent submission to the Productivity Commission we recommended looking at markets like Norway and the Netherlands for examples of how market mechanisms could kick-start or accelerate the EV market in New Zealand.

Building an enduring relationship with you

We acknowledge that conversations about complex regulatory settings can often be fraught with difficulty, and it will take time to come up with the truly fit for purpose regulation that is necessary in the emerging technology environment.

We are also aware of the challenges in transitioning to a low-emissions economy, the trade-offs that will be required, and the need for a clear plan for doing so.

It will be important to engage the industry on the next steps to create a market structure that works to deliver benefits for all New Zealanders in both respects and we look forward to working constructively with you and the new Government on the tasks that lie ahead.

Genesis has many stakeholders to consider, however our strategic priorities commit us to putting customers first. Not doing so, we believe, would risk the long-term sustainability of Genesis Energy's value drivers. In that vein, you can count on us to always make arguments that are in the long-term interest of New Zealand energy consumers.