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Electricity Authority  
**WELLINGTON**

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Genesis Energy Limited

## Enabling mass participation in the electricity market

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Genesis Energy Limited (**Genesis**) welcomes the opportunity to provide a submission to the Electricity Authority (**the Authority**) on the consultation paper *Enabling mass participation in the electricity market* dated 30 May 2017 (**the consultation paper**).

### Executive summary

The electricity sector continues to change at an unprecedented pace. Governments to start ups, established companies to consumers are all significantly investing in new ways of generating, consuming and storing energy. Regulatory decision makers are rightly contemplating the need to take a bold approach to meet this inevitable change to provide certainty to the market.

### *Key takeaways from our submission*

Our submission emphasises the fact that consumers are at the core of the changing energy environment. The movement from network first to consumer benefit first is a substantial shift in thinking but one we believe is much needed, and regulations need to shift there too. Our key points can be summarised as:

- Customers want comfort, convenience and control. They are in fact *prosumers*.
- We have been here before. The sector has faced change and needs to evolve again.
- Existing policy settings will inevitably fail to cope with rapid change and take a customer perspective. Consumers are not installation control points (**ICPs**) and there are already ongoing challenges to safeguard the collection and use of consumer data. What we are experiencing now is just the tip of the consumer 'data iceberg'.
- Genesis believes that the market fundamentals of a level playing field in the emerging energy environment are already being undermined. Current policy settings allowing opportunistic behaviours from natural monopolies in the market appear prevalent. This creates a suboptimal market for consumers that will ultimately limit both the

range of existing products and services, and those yet to be developed through innovation, that they will have access to for their benefit.

- While there may be many complex ways to tinker with existing frameworks, Genesis believes that the best outcome for consumers will only ever be truly served through the mandatory structural separation of electricity distribution businesses (**EDBs**). By this we mean the complete separation of monopoly activities from those that are competitive. The precedent of benefits to consumers can be seen in the Telecom structural separation into Spark and Chorus.

We recognise that for regulators it is impossible to have complete foresight as to how effective a regulatory regime will turn out to be at the time it is designed and implemented.<sup>1</sup> However, this should not be a barrier to change or a reason for the debate to be avoided.<sup>2</sup>

While these messages are provided to the Authority, we also address them to the Commerce Commission (**the Commission**) and Ministry of Business, Innovation & Employment (**MBIE**) as only a cohesive, coordinated approach will allow New Zealand to tackle how to regulate the emerging energy environment in a meaningful way.

Ongoing dialogue and debate will be important to get the market fundamentals right. It is complex, but if New Zealand wants to truly embrace the emerging technology market, how successful we are will be determined by the decisions we make today.

### ***Customer focused, customer first***

Within the brave new energy world, it will be important to ensure regulatory settings are both fit for purpose and flexible for the future. A fundamental paradigm shift in thinking is required. Emerging technologies are about putting customers first. It is this thinking that will continue to lead to the evolution of new business models, agile companies, disruptive processes and innovation.<sup>3</sup>

Regulators for the electricity sector appear to have previously attempted to shoehorn the future into policy frameworks designed for the past. Broadly speaking, the current regime favours network benefits over customer benefits<sup>4</sup> and if that continues New Zealand will never be able to completely realise the true value of innovation.

Genesis acknowledges the Authority's willingness to engage on these complex issues and the efforts in preparing this consultation paper. We look forward to working together in what is a once in a generation opportunity to lay foundations for the future of the sector.

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<sup>1</sup> Mumford, P "Best Practice Regulation: Setting Targets and Detecting Vulnerabilities" Policy Quarterly 36 (2011).

<sup>2</sup> Genesis also advocates that some of the other focus areas suggested in the consultation paper could prove to be an unnecessary distraction at this point in time, meaning if, as a sector, we focus on getting the substantive market settings right first, the solutions for these issues will become clearer e.g. defining who is a participant and the ability for parties to participate in peer to peer trading. Getting the market settings right will allow competition in this space to flourish from the outset within clear and consistent parameters that send the right investment signals to participants.

<sup>3</sup> Bettencourt, L; Ulwick "The Customer-Centred Innovation Map" Harvard Business Review May 2008.

<sup>4</sup> For example, the consultation paper relates to how solar generation and home storage via batteries offers a way to shift people off the network therefore increasing the ability of network owners to manage capacity on the network i.e. a network benefit.

### ***Lessons from the past: We have been here before***

It is important to remember the electricity sector has faced generational change before. Previous significant policy reform in the electricity sector has seen it undergo large-scale change from a state-run vertically integrated monopoly to a mostly market-driven model relying on general competition law and specialist regulators.<sup>5</sup>

The regulatory environment New Zealand currently operates under began life in the mid 1980's and 30 years later we find ourselves at another crossroads. The question is relatively binary. Do we act to establish a comprehensive package conducive to the sort of large, long-term investment the sector needs for emerging energy technologies to thrive for the benefit of consumers? Or do we institute a continuous stream of minor reforms and tweaks, inadvertently protecting the shadows of the past? *Are we investing to make a faster Ford Cortina or are we building an electric vehicle fit for the future?*

While binary, the question is not easy to answer. It is well documented that regulatory interventions that miss the mark can alter the interaction and evolution in a market, affecting the nature of technological innovation and change, but staying silent can have equally negative outcomes<sup>6, 7</sup>.

Delivering benefits to customers in an emerging technologies world will not be brought about by short sighted, protectionist or absent regulations. Rather, Genesis strongly advocates that regulation must be as adaptive and enabling as the technologies that will transform how New Zealanders generate and consume energy now and into the future.

These challenges are seen in other sectors such as telecommunications, broadcasting and transport. This shows us we cannot be afraid of change and that it is inevitable; but the best opportunity for success comes from putting consumer outcomes first.

### **Consumers are not ICPs**

The electricity industry of today is the outcome of network first thinking; thinking that has de-humanised the very people the network serves, and the data produced, by referring to them solely as ICPs. But while ICPs do not have energy wants and needs, end customers do: a new kind of consumer – the prosumer - wants to control their energy or invest in new technology, and it is fundamentally the job of market participants to deliver competitive products and services to meet this demand. It is also fundamental that these freedoms of comfort, convenience, and control, enjoyed by customers, should not be limited now or in the future.

While electrons are the same, the way they are provided to customers is not. It is a customer's prerogative to choose an in-home energy management solution, install solar panels, purchase an in-home battery or electric vehicle, or do whatever it may be in the future that meets their energy wants and needs. And energy management now is not the hot water ripple control of the past: while it may be convenient for networks to have access to emerging technologies,

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<sup>5</sup> Scott, PG, de Joux, D "Uncertainty and Regulation: Insights from Two Network Industries" 2011.

<sup>6</sup> Ibid. at 3.

<sup>7</sup> "What may appear optimal in the narrow frame of a market in one time period may not be optimal when taken in a dynamic frame across a wider system incorporating all technologies, markets and the regulatory policy environment. Sound regulatory policy must take the wider context into account. The same can be said for regulatory settings that are ambiguous or silent" Heatley, D, Howell, B, *Regulatory Implications of Structural Separation 2010* – submission to Ministry of Economic Development.

theirs is a conflicting need that will disadvantage the consumer (who, for example, could be exposed to high grid prices if EDBs draw on their in-home batteries during peak periods).

We are concerned that the legitimacy of customer choice is at risk of being undermined by a natural monopoly that can dictate what technologies, and purpose for those technologies, consumers can and cannot have. For example, currently an EDB might only permit the installation of certain types of batteries or solar inverters on their network as it is deemed as being in the best interests of the network. This is network first thinking at the expense of consumer benefit.

### **Protecting consumer data is paramount**

Consumers own their unique customer data and that data can only be collected, stored, accessed or released with expressed authority. The rights they are owed under the Privacy Act 1993 mean any unauthorised use of customer data is expressly prohibited.

A recent letter from the Privacy Commissioner, *Public statement about the bulk disclosure of smart meter data*, highlighted the need to ensure that consumer data, how it is handled and for what purpose, is managed carefully. Genesis believes that issues surrounding data, and data use, need to be resolved immediately if the sector is to maintain the trust and confidence of consumers. Half hour data that consumers generate today is just the tip the 'data iceberg' we should expect as emerging technologies and energy management services become more prevalent.

Access to data opens-up significant opportunity to deliver consumer benefits through innovative product and service development. However, just what purpose parties can collect and access data for must be clearly defined in contractual arrangements that protect consumers from misuse of their data. Just like other sectors' information and data disclosure should not be a 'free for all' – e.g. we wouldn't expect banks to provide financial transactions openly - the energy sector should ensure protection of consumers' data.

Under the current arrangements, Genesis has publicly raised concerns that EDBs could use customer data that they have access to for 'network planning purposes' under Model Use of Systems Agreements (which is currently poorly defined) to compete in unregulated competitive markets. This is clearly beyond the scope of the intended purpose for that data, and inconsistent with consumer expectations of how their data would be used.

Fundamentally, this misuse of data has the real potential to distort the competitive market to the detriment of consumers. This will erode the trust and confidence consumers have in the electricity sector.

### **The playing field is not level**

As the Authority recognises in its recently published *Statement of Corporate Intent*, a level playing field is crucial to let the competitive market work effectively. Genesis is firmly of the view that a level playing field is not currently materialising in the emerging technology environment, for the following reasons:

## ***Competition***

Genesis believes competition simply cannot thrive when there is a group of participants that have the potential to take advantage of a monopoly position to create an artificial 'leg-up'. Currently monopoly network owners can distort developing emerging competitive markets by using their regulated asset base, or access to data, as leverage to make sub-commercial forays into emerging technologies markets; offering them below cost. This opportunistic behaviour occurs because they have guaranteed cost recovery.

As long as EDBs are able to make these riskless investments, it creates an unsustainable commercial environment for other participants, particularly new entrants. It effectively shuts down competition for the life of the technology, preventing consumers from realising the benefits of efficient competition.<sup>8</sup>

As an example, we observe there is currently insufficient transparency around related party transactions of monopoly businesses, which could mean that services are procured from related parties by default even though the competitive market could potentially offer a more efficient solution.

For example, an EDB might automatically select its network-owned tree-trimming business to provide services despite there being a more competitive option available in the market from an independent contractor. If this is the case, it is to the detriment of the regulated consumer who will pay greater costs than they can reasonably expect to. If that happens in the case of tree trimming we can only speculate that it will happen as EDBs form battery and solar companies, locking out competition and feeding themselves, rather than benefitting consumers.

## ***Transparency***

Genesis has commented on the transparency of related party transactions above and the effect this has on competition. Transparency is lacking under the existing rules in our view because the current information disclosure rules are not sufficiently targeted or granular.

At present, an interested party under section 53A of the Commerce Act 1986 may seek information to assess whether Part 4 of the Act is being met. However, the kind of information typically provided fails to offer the detail that is needed to make genuine evaluations on whether the intent of the legislation is being met. Absence of sufficient information makes it harder to assess or challenge investment decisions made by monopoly network owners.

Genesis stresses that consumers' trust and confidence in the sector relies on market participants taking the utmost care to access and use consumer data for intended purposes only. We have expressed our concern that this is at risk under the current rules where monopoly network owners compete in emerging technologies areas without any commercial or contractual consequence.

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<sup>8</sup> Market dynamics where consumers benefit include price tensions, range of service providers and products, comparisons of goods and services. This dynamic operates to push providers of goods and services to continually innovate.

### ***Thinking to the future***

Genesis has commented above on the importance of consumer choice, including the option to invest in emerging technology now or in the future.

We consider that under current rules this choice is threatened by monopoly network owners who, as the consultation paper describes, are in a 'privileged position' of control over the network. They can dictate what technology can connect to their network – likely favouring self-provision - and the costs that a consumer must pay for network services related to that technology.

### **How can the playing field be levelled?**

When considered together, these issues are leading to a distorted and inefficient emerging technology market that will fail to deliver real benefits for consumers. We urge the Authority to recognise that in a truly competitive, efficient and future-focused market no participant should be able to:

- Leverage off guaranteed cost recovery to offer emerging technologies below cost and without risk of failure;
- Use its monopoly position to procure inefficient services from related parties;
- Fail to provide sufficient justification of investment decisions under current disclosure rules;
- Offer network access terms that serve as a barrier to entry or innovation;
- Lock out consumer choice by dictating what types of technology can be used; and
- Misappropriate customer data under the guise of permitted use to gain an advantage in competitive markets.

### ***Structural separation as the solution***

While there are potential piece meal solutions, Genesis firmly believes that the Authority should consider the mandated structural separation of EDB's regulated market activities from competitive market activities.

Structural separation also focuses on regulating 'how' participants compete in the market, rather than 'who' can compete; striking the right balance between offering flexibility for new technologies to be adopted over time; yet also providing sufficient certainty and confidence to all new and existing market participants (rather than any particular subset).

This means that the community trust owners of EDBs will not be excluded from owning businesses in competitive markets, rather they will need to operate them as distinct subsidiaries with separate executive and board reporting structures.

This is not an attempt to shut network owners out of competitive areas<sup>9</sup>, but to ensure EDBs are focusing on the networks they were established to run. This was highlighted by Hon. Judith Collins Energy and Resources Minister.<sup>10</sup>

### ***Lessons from the past***

The separation of Telecom into the Spark and Chorus<sup>11</sup> businesses provides evidence of how the structural separation of a natural monopoly has successfully improved market competition for the benefit of New Zealand consumers.

A 2006 Cabinet Paper (**Cabinet paper**) recognised that the common characteristics of OECD countries with leading telecommunications sectors was the vigour of competition evident, combined with regulatory regimes that pro-actively encouraged competition.<sup>12</sup> The Government was concerned that market conditions in New Zealand did not meet this standard, observing:

“Vertically integrated incumbents have incentives and the ability to place access-seekers at a commercial disadvantage by supplying wholesale services on less favourable terms and conditions than they make available to their own retail arm.”

Cabinet considered the benefits of structural separation as being reduced or an absence of incentives to discriminate against other participants; reduced anti-competitive behaviour; and limited scope for cross-subsidisation. These benefits were lauded by Vector in a submission to MBIE in 2010:

“Structural separation would realise considerable industry-wide benefits and lead to more targeted and simplified regulation. It largely mitigates Telecom’s incentives to abuse its market power... We recommend MED also advance with urgency consideration of mandatory separation of Telecom...as a means to create a level competitive playing field.”<sup>13</sup>

### ***Parallel benefits for regulating the emerging technology market***

The benefits that were identified above in the Cabinet paper, and by Vector, make structural separation a proposition worth measured consideration. Key benefits include:

- More targeted and less complex regulatory settings;
- Reduction in costs associated with administrative monitoring and reporting requirements resulting from pseudo-separation (legal/operational separation);
- Trusts will be able to compete (through separate businesses) in the emerging technology space and offer goods and services to customers; and

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<sup>9</sup> <https://www.newsroom.co.nz/2017/06/06/32718/vectors-battery-plan-hands-control-to-customers>

<sup>10</sup> “My starting point is that your core business is electricity lines. You are there to ensure your communities receive efficient and reliable access to electricity infrastructure...you should aim to stay focused on your core business in order to successfully adapt to technological change, meet the needs of consumers, and ensure that the value of your considerable assets is maintained.”  
<https://www.beehive.govt.nz/speech/address-energy-trusts-new-zealand-autumn-conference>

<sup>11</sup> Ongoing rapid technological change was putting the existing market structures under relentless pressure, and New Zealand was at risk of being left behind if it didn’t make changes to the regulatory frameworks facilitating competition in the sector.

<sup>12</sup> <https://www.beehive.govt.nz/Documents/Files/Cabinet%20paper%20and%20minute.pdf>

<sup>13</sup> <http://www.mbie.govt.nz/info-services/sectors-industries/technology-communications/communications/previous-reviews-and-consultations/telecom-separation/documents-image-library/telecom-separation/submissions/telecom-structural-separation-submission-vector.pdf>

- Clear lines between monopoly businesses focused on the 'health' of the network and competitive businesses are positive for the market and consumers to help stimulate innovative goods and service provision.

#### **Next steps: The journey to structural separation**

Genesis acknowledges that structurally separating participants in the market will not be straightforward and will take time to complete if the split of the Spark and Chorus businesses is any guide. It will require intensive collaboration between the Authority, the Commission and MBIE, plus consultation with diverse industry stakeholders, each of whom has a valid perspective to bring to the table.

More importantly, just because it is complex cannot be an excuse to stay within the limits of existing regulatory frameworks that are no longer fit for purpose or fit for the future. Nor is it useful to shy away from the hard work. Disjointed policy decisions that solve problems with more problems, pick technology winners and losers, or limit innovation, will not deliver benefits to consumers.

Regulatory outcomes need to strike the right balance between setting conduct rules and allowing competitive markets to develop at pace. The Authority, the Commission and MBIE need to engage the sector on the next steps necessary to truly level the competitive playing field.

To this end, Genesis looks forward to positively contributing to these complex matters.

If you would like to discuss any of these matters further, please contact me by email: [dean.schmidt@genesisenenergy.co.nz](mailto:dean.schmidt@genesisenenergy.co.nz).

Yours sincerely



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