## **Evolving Multiple Retailing and Switching**

### Submission to the Electricity Authority

### **Context and Model Assumption**

This submission is based on a proposed model referred to as the **New Zealand Energy Exchange (NZeX)**. NZeX is a **centralised digital market platform**, analogous to the NZX share exchange, that allows **decentralised**, **autonomous participation** by consumers, prosumers, and aggregators. Certified Home Energy Management Systems (HEMs), EVs, batteries, and other flexible assets can directly post offers or bids and transact automatically based on market conditions.

NZeX differs from current systems by:

- Enabling full transparency of location, energy flows, and delivery paths.
- Applying dynamic delivery pricing (e.g. kWh/km) signalled by Distribution System Operators (DSOs).
- Reducing reliance on traditional retailers, who transition to optional service roles like brokers or aggregators.
- Supporting peer-to-peer (P2P) and local energy markets.

Answers below reflect this model as a feasible and preferred pathway.

# Q1. Do you support the Authority's proposal to enable Multiple Trading Relationships (MTRs)? Why or why not?

Yes. MTRs are a step toward unbundling energy services and allowing more consumer choice. However, NZeX goes further: it enables direct, automated, location-aware trading between consumers and generators via certified Home Energy Management Systems (HEMs), removing the need for traditional retail intermediaries. MTRs should evolve toward **platform-based participation** rather than relying on retailer-centric models.

## Q2. What benefits or risks do you foresee with enabling MTRs? Benefits:

- Consumers can access energy from multiple sources (e.g. solar, V2G, community storage).
- Encourages innovation by opening up participation to aggregators and brokers.
- Enables dynamic pricing and P2P flexibility.

### Risks (under current design):

- Retaining traditional retailers as central access points may inhibit innovation.
- Without digital settlement and visibility protocols, complexity and trust issues may grow.

NZeX mitigates these risks via certified digital twins, DSO congestion APIs, and real-time pricing at the point of connection.

### Q3. Are there any alternative options that better meet the Authority's objectives?

Yes — the **New Zealand Energy Exchange (NZeX)** offers a more future-facing platform:

- Certified HEMs participate in real-time markets.
- Delivery pricing is based on kWh/km (dynamic DSO signal).

• Enables full visibility across generation, demand, and flexibility services.

This model better aligns with digitalisation, decarbonisation, and affordability goals.

# Q4. Do you support the proposed process for switching and customer access to multiple relationships?

Partial support. The proposal still relies on traditional "switching" between retailers. NZeX proposes **continuous**, **permissioned market participation** via HEMs — switching is replaced by **conditional offers** and automated fulfilment. Settlement occurs via a central clearing layer.

Q5. How should obligations and liabilities be shared across retailers? In NZeX, liability is shared based on:

- HEM certification and performance standards.
- Platform compliance for energy transfer and settlement.
- DSOs signalling real-time network constraints and dynamic delivery pricing.

Retailers in this model transition to **brokers or aggregators** offering financial services, not mandatory market participants.

## Q6. Should consumers be able to participate directly in the market (e.g. export from batteries or EVs)?

Absolutely. The system must evolve to support **fully autonomous participation** via certified digital systems (e.g. HEMs). V2G, smart hot water, and solar exports should be controllable via automated offers into NZeX, prioritising local use, minimal network load, and value maximisation for the consumer.

## Q7. What role do you see for retailers in a system with multiple relationships or P2P trading?

Retailers must evolve:

- From energy sellers to digital service providers.
- They can offer HEMs, battery leasing, optimisation algorithms, and participation-as-aservice.
- But should no longer gatekeep market access.

They can become **trusted brokers** in a **centralised digital exchange (NZeX)** that supports **decentralised**, **autonomous participation** 

#### LV Grid Visibility

EM6 shows what's possible at HV scale, **LV grid digitalisation is missing**. Independent third parties are well-positioned to fill this role where decentralised trading depends on local grid visibility, bid validation, and real-time coordination.

#### **Optional Parallel Pathway via NZeX**

A decentralised trading platform – provisionally titled the *New Zealand Energy Exchange* (*NZeX*) – could be introduced as an **opt-in parallel system**, operating alongside the existing retail model. NZeX would allow certified Home Energy Management Systems (HEMs), V2G-enabled EVs, and local generation to participate directly in a digital, transparent, locationally aware energy market.

Retailers could evolve into brokers or service providers, but participation in NZeX would not require retailer intermediation. This gradual, voluntary adoption model avoids disruption, encourages innovation, and empowers prosumers and communities to optimise local supply and demand while reducing pressure on national infrastructure.

Such a transition aligns with the Authority's digitalisation and multiple trading relationship initiatives, while providing a credible path to long-term system transformation.

Graeme Weston

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