Chairman: Ben Gibson, [redacted]
Secretary: David Inch, [redacted]

INDEPENDENT ELECTRICITY GENERATORS ASSOCIATION

19 August 2025

Future Security and Reliability team
Electricity Authority
By email: fsr@ea.govt.nz

Dear team,

Re: Consultation Paper - The future operation of New Zealand's power system – Issues and high-level options

The Independent Electricity Generators Association Inc. (IEGA) appreciates the opportunity to make this submission on the Electricity Authority's (Authority) discussion on issues and high-level options for the future operation of New Zealand's power system.[1]

The IEGA's understanding of the Authority's interest is to shape future governance of real-time dispatch when demand is increasing, and there are more and smaller participants and consumers connected to distribution networks that are interested in being involved with a range of objectives relating to their energy production and use. The consultation paper appears to focus on participation by end consumers connected to the low voltage part of the distribution network.

The IEGA's interest is to ensure arrangements are equitable for distributed flexibility participation whether offered by commercial organisations or individual consumers and regardless of whether there is a Total DSO, Total TSO or Hybrid DSO model.

Distributed flexibility

The consultation paper describes Distributed Energy Resources (DER) and then describes Consumer Energy Resources (CER) as a subset. The IEGA prefers MBIE's approach outlined in its Electricity Market Measures Report to generation and demand activities connected to distribution networks.

MBIE's Electricity Market Measures discussion paper[2] used "the term 'distributed flexibility' to describe all types of demand side flexibility, demand response and flexibility from distributed generation and batteries. Distributed flexibility can be provided by large scale distributed energy resources (DER), or household-level consumer energy resources (CER)."

> "DER are business-owned assets, and their primary purpose can be either to provide energy system services or to provide business services. They are generally larger in kW/kWh and can be

[1] The Committee has signed off this submission on behalf of members.
[2] See Section 10 pages 285 - 359 https://www.mbie.govt.nz/dmsdocument/26909-measures-for-transition-to-an-expanded-and-highly-renewable-electricity-system-pdf August 2023

connected at any voltage level on the distribution network. DER can be generation, storage and demand assets. Examples include medium-sized solar farms, wind farms, batteries, commercial EV fleet charging, and industrial and commercial demand-side response from equipment or buildings."

"CER are (residential) consumer-owned assets, and their primary purpose is to provide a non-energy system service such as heating a home or transportation. However, they can also control their operation to provide energy system services. CER are generally smaller in kW/kWh size and they are connected to the low-voltage distribution network at the consumer's premises. CER can include generation, storage, and demand assets, and common examples include EV charging (including vehicle to gird (V2G)), hot water, heat pumps, heating, ventilation and air conditioning (HVAC), home appliances, small-scale batteries and rooftop solar or small-scale wind." [3]

IEGA members' assets are 'DER' – business-owned generation (including batteries) connected to any voltage level on the distribution network. In our view, the key difference between DER and CER is scale and the increasing requirement for co-ordination with the smaller scale CER. Smudging CER into DER or focusing on CER and not DER could lead to suboptimal outcomes.

Benefits of distributed flexibility

Real-time dispatch of distributed flexibility (DER and CER) should be expected to defer or avoid investment in distribution and transmission network infrastructure. That is, distributed flexibility is a non-network solution. To maximise these opportunities the arrangements for non-network solutions under any DSO model must be easy to engage in and have transparent marginal cost-based compensation payments for solutions on both the distribution and transmission networks (ACOD and ACOT respectively). That is, a Total TSO model must enable distribution connected non-network solutions (and not be considered too small or inconsequential to the scale of the Total TSO role); a Total DSO model must recognise that a non-network solution on the distribution network can also provide benefits for the transmission grid.

The IEGA suggests the Authority focus on requirements for contracting non-network solutions as an essential element of its preferred Hybrid DSO model. The Authority should also be monitoring contracting of non-network solutions as these are least cost options as the power system evolves.

We would welcome the opportunity to discuss this submission with you.

Yours sincerely

Ben Gibson
Chair

[3] This is an interesting description of why Energy Consumers Australia prefer to use CER: https://energyconsumersaustralia.com.au/news/death-to-der-why-we-need-to-change-the-language-we-use-for-the-energy-transition?mc_cid=d8501bccfb&mc_eid=2f0ba19009