31 July 2025

Electricity Authority

To: fsr@ea.govt.nz

Re: A Regulatory Roadmap for Battery Energy Storage Systems Paper

Utilities Disputes Limited | Tautohetohe Whaipainga (UDL) welcomes the opportunity to comment on the paper *A Regulatory Roadmap for Battery Energy Storage Systems Paper* (*Battery Systems Paper*).

UDL operates the mandated Energy Complaints Scheme (ECS).[1] UDL is a not-for-profit company and there is no charge for a consumer to make a complaint. The core purpose of the ECS is to ensure that any person who has a complaint about a retailer or distributor has access to an independent process for resolving it.[2] The ECS in the 2024-2025 reporting year received 7533 complaints and 11499 queries.

Response

This paper joins a number of recent papers from the EA concerning or touching upon Distributed Energy Resources (DERs) such as solar, wind and batteries. The *Battery Systems Paper* is a roadmap paper and the EA asks for any feedback on potential gaps or work that it should reprioritise. UDL takes this opportunity to make four general points:

A. That any technical analysis concerning battery energy storage systems (BESS) be accompanied by a review of the Electricity Industry Act 2010 in particular definitions such as generator, distributor, and retailer. These new products may not fit easily within these definitions and may need to be amended if the consumer is to be protected. As the Australian Energy Regulator (AER) explains it is important for trust in the industry, that consumers who use services based on DERs and other new technologies have the same protections as traditional consumers:

> *If consumers understand they will receive consistent protection and outcomes regardless of the energy service they use, this is likely to promote trust and confidence in the energy market, thereby supporting competition, innovation and the increased uptake of consumer energy resources, which would promote the energy transition.*[3]

[1] See Electricity Industry Act 2010 (EIA), s 95. UDL, in addition to the ECS, operates an independent telecommunication scheme, voluntary water dispute resolution schemes, and the mandated Broadband Shared Property Access Disputes Scheme which considers complaints about the laying of fibre in shared driveways. UDL also has an educative function, both in promoting its resolution schemes, being the first point of contact for consumers, and providing systemic insights to the various industries. UDL's Telecommunications Complaints Scheme is not an Industry Dispute Resolution Scheme under Part 7 of the Telecommunications Act 2001.

[2] See ibid. sch 4, clause 1.

[3] AER, *Review of Consumer Protections for Future Energy Services*, November 2023, 22.

Such work will also require liaison with Ministry of Business, Innovation & Employment Energy and Consumer teams, who manage any legislative change of the definitions of the EIA and have oversight over the ECS.

B. The EA may be assisted by work completed by AER on its definitions. It has advocated broadening the definition of service provider to anyone who provides an energy service that:

- *sells electricity to a consumer's premises*
- *unless exempted, on-sells or exports energy from an embedded network or manages the flow of electricity to and from an embedded network*
- *exports electricity from a consumer's premises*
- *controls, constrains, prevents or otherwise has a substantial impact on the flow of electricity to and from a consumer's premises.*[4]

C. After clarifying the EIA definitions further work will then be needed to assess which bodies should be members of the ECS. An aspect of DERs is that they appear to expand or redefine the traditional relationships distributors, generators, and retailers have with consumers. For example, up till now generators have not been part of the ECS which is appropriate given their distance from the consumer. However, with the introduction of DERs the generator may be at the consumer's premises, and this presence is likely to give rise to complaints in term of issues such the generating equipment's effects on the premises.[5] It is also possible that new products such as flexibility aggregators may become virtual generators by contracting with consumers, and aggregating their smaller electricity loads. Therefore, these new consumer relationships brought about by DERs introduction into the market would suggest these bodies should be members of the ECS.[6]

D. That any technical analysis concerning BESS be accompanied by policy work on how DER products may affect the consumer. This analysis will be important to assess what amendments are required to regulatory instruments such as the Consumer Care Obligations (CCOs). To delay may result in less scope for addressing the needs of consumers, as new systems have already been agreed. UDL has previously drawn attention to the EA that in assessing the regulatory needs of DERs it may be assisted by the Consumer Risk Assessment Tool (CRAT) developed by Australia's Energy Security Board (AESB).[7] For example, an AESB workshop using the CRAT arrived at this analysis in respect of community batteries:[8]

[4] AER, *Review of Consumer Protections for Future Energy Services,* Nov 2023, 26. Limb 4 may benefit from the addition of the word "increasing".
[5] See UDL to EA, *Evolving Multiple Retailing and Switching*, 29 July 2025, pgs 2-3, 12.;
[6] For a full discussion see UDL's response to the EA paper, *Evolving Multiple Retailing and Switching*.
[7] See UDL to EA, *Working to Together to Ensure our Electricity System Meets the Future Needs of New Zealanders*, 25 June 2025, pg 9; AESB, *Post-2025 Market Design Final Advice to Energy Ministers*, 27 July 2021, Part A, 10 & Part C, 26-27.
[8] See Consumer Risk Assessment Tool, June 2022 NECF = National Energy Customer Framework; ACL = Australian Consumer Law.

Benefits	Risks	Evaluate	Treat
• Potential costs savings from reduced network costs • Community vibes • Consumers contributing to energy transition • Possibly more price stability • Consumers independent from large or traditional providers • Potential for more reliable energy	• Customer lock-in contracts/ higher price • Can customer make informed decisions • Complexity of information and contracts • How to deal with interpersonal conflicts? • Could it disincentivise other DER? • Undermines 'open access' principle for customer DER	• Need explicit informed consent to mitigate legal issues • Use regular sand box to test an ACL-based framework • At what point does the embedded networks framework kick in • Issues of increasing overlap between different types of regulation	• Body corporate model • ACL • Allow customers to opt out of NECF and take a simpler principles base framework • Determine what is essential and what is not • Make sure contractual agreements are clear

The above consumer protection elements will be important if the EA is to achieve its stated aim of having a regulatory environment which results in: "consumers having the tools and confidence to participate in electricity markets and to support the operation of New Zealand's power system and the reliability of the electricity supply."[9] Moreover as the EA highlights many small-scale "…BESSs are typically used in home and small businesses (ie. they are used by mass market consumers)."[10] Therefore it would be an oversight to not factor in consumer protection issues in a focussed way, from the roadmap's initiation. UDL is available to the EA to work on and discuss these issues.

Sample of Consumer Issues

To illustrate the importance of these general points, find below a brief summary of consumer issues that UDL has raised in other submissions about DERs. These issues illustrate how technical changes can have consequences for the consumer.

1. DER services do give rise to complaints.[11] At this stage batteries have rarely featured as a separate issue except as an aspect of solar equipment. This will likely change as new products come into the market. While solving many consumer problems, DERs can present new challenges. The EA should therefore not take a hands-off approach to DERs.[12] These new products introduce new types of contracts, which the consumer may take time to differentiate from traditional retailing services. For example, some consumers do not always appreciate the ramifications of entering into longer term contracts, and because of this the resultant liabilities of breaking such contracts.

2. The entry into the market of DERs and AI technologies is an opportunity for the EA to reform some its processes. The registration[13] of industry participants with the EA appears an opportunity to educate and dialogue with these new industry participants about their business model, and how industry obligations apply to them.[14] For example it is not clear that new industry participants are fully aware of the CCOs.

3. With the introduction of DERs and their integration into the network, the issue of billing information for the consumer becomes urgent, with consumers likely to receive bills from

[9] See Battery Systems Paper, s 2.25.
[10] Ibid, 2.16.
[11] See snapshot, *Evolving Multiple Retailing and Switching* , pgs 4-6.
[12] See discussion *Working to Together to Ensure our Electricity System Meets the Future Needs of New Zealanders*, 25 June 2025, pgs 6-7.
[13] See Electricity Industry Act 2010, s 27.
[14] For example, *Working Together to Ensure Our Electricity System Meets the Future Needs of all New Zealanders*, 25 June 2025, pg 7.

multiple retailers. UDL recommends that bills include information such as the name of the consumer's plan, the term of the plan, if a read is actual or estimated, a brief explanation of the rates charged, and that credits are clearly itemised and explained rather than included within other figures (e.g. a running total).[15]

4. It is also not in the consumer's interest to receive multiple bills and credits for their electricity consumption, and it would be a backward step if a consumer is required to pay a third-party service to act as a billing aggregator to understand their electricity consumption and exportation. Therefore, further reflection is needed as to how to simplify the billing and credit process for the consumer.[16]

5. Products based on DERs have the capacity to help the consumer, but as noted by the EA there are concerns for the future health of the network:

> *In addition to providing opportunities, these technologies do, however, pose some challenges. In particular, we expect that co-ordinating the real-time operation of New Zealand's power system to supply electricity to consumers at the level of reliability they want will become more difficult over the coming years. This increased difficulty will be the result of evolving technologies enabling a significant increase in variable and intermittent generation and an increase in bi-directional electricity flows.*[17]

6. Such forecasts need to be included in any discussion about DERs, as any deterioration raises consumer issues. For example, any deterioration would likely mean retailers and distributors will have to rethink their approaches to breaches of the quality of supply guarantee under the Consumer Guarantees Act 1993 (CGA).[18] Increased demands on consumers may strain consumers' already stretched resilience. Therefore, while there may not be a legal breach of the quality of supply, industry participants may have to expand their toolbox of remedies to include some form of consumer credits according to a self-imposed industry practice or standard.[19]

7. As DERs are integrated into the network, with their energy exported through an ICP for purchase, the issue of responsibility for the quality of supply guarantee under the CGA may also become less straightforward.

8. Currently the retailer is primarily responsible for the quality of supply guarantee. This appears a legislative choice, so the consumer has a clear point of contact, rather than having to choose between their retailer and distributor. However, network issues are often the cause of the interruption in supply. Therefore, often the distributor responds to the complaint through the retailer or with the knowledge of the retailer, directly to the consumer.

9. With the introduction of multiple trading relationships and the integration of DERs it is not clear this breakdown of responsibilities will answer the needs of the consumer. If there are multiple retailers, all retailers would likely have to be informed. The retailers may also have different contractual terms about outages, and this could cause confusion if it is determined both retailers should take responsibility for the outage. It is also possible that the exporter retailer may be acting like a generator only and not be retailing, further complicating the outage analysis.

---

[15] See discussion UDL to EA, Improving Pricing Plan Options Time-Varying Retail pricing for Electricity Consumption and Supply, 28 March 2025, pg 7.

[16] See full discussion in the context of multiple trading relationships: *Evolving Multiple Retailing and Switching*, pgs 2 & 9.

[17] EA, *Addressing Larger Voltage Deviations and the Network Performance Issues in New Zealand Power System*, 25 June 2024, pg 3.

[18] See s 7A of the Consumer Guarantee Act 1993.

[19] See UDL to EA, *Addressing: Harmonics, Voltage, and Frequency,* 20 August 2024, pg. 4.

10. It is also possible that the meter may be the cause of the outage. At present the retailer takes responsibility for meter issues, especially as Metering Equipment Providers are not required to be members of ECS. With multiple retailers having a relationship with the ICP it is not clear who would take responsibility in such circumstances.[20]

Thank you for the opportunity to comment on the *Battery Systems Paper*. If you have any questions, please contact Paul Byers, Legal and Policy Officer at: [redacted]

[redacted]

Paul Byers – Legal and Policy Officer

[20] See full discussion *Evolving Multiple Retailing and Switching*, pg. 8.