

To: Electricity Authority (EA)
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From: Electricity Engineers' Association of NZ

Date: 21 November 2025

Subject: EEA Submission – Consultation Paper - *Requiring distributors to pay a rebate when consumers supply electricity at peak times: definition of a small business*

OVERVIEW

The Electricity Engineers' Association (EEA) appreciates the opportunity to comment on the consultation *Requiring distributors to pay a rebate when consumers supply electricity at peak times – definition of a small business*.

Our feedback is focused on the engineering, technical and operational implications of the proposed definition. We do not comment on the underlying policy intent. The EEA represents New Zealand's electricity network engineering profession, including all electricity distribution businesses, and our interest lies in ensuring the definition is workable, consistent, and aligned with distribution-network safety and reliability requirements.

Overall Position

Overall, the proposed thresholds for defining a small business consumer (≤ 45 kVA connection capacity or ≤ 45 kW deliverable generation capacity) appear broadly workable. However, effective implementation will depend on the definitions being technically clear, practical to apply across diverse networks, and supported by accessible data.

A rebate mechanism linked to peak-time exports also interacts directly with network constraints, hosting-capacity assessments, and wider DER and flexibility work underway across industry. Ensuring alignment will be essential to avoid unintended consequences and to maintain a clear, safe pathway for integrating small-scale generation and consumer flexibility into local networks.

Technical and Operational Matters

1. Clarity and practicality of the 45 kVA / 45 kW thresholds:

Distributors will need to apply the thresholds consistently, but connection capacity and generation capacity are not always stored in a uniform manner across network systems. For some sites, capacity may only be inferred from fuse sizes, transformer ratings, or historic connection records.

Additional guidance would help ensure nationwide consistency, particularly regarding:

- how connection capacity should be determined where records are incomplete
- whether fuse size, transformer rating or price category may be used as acceptable proxies
- treatment of mixed-use sites (residential + business loads)
- handling of non-standard or legacy connection configurations.

For generation capacity, distributors typically rely on inverter nameplate ratings. Clarification would help where export-limiters are applied, multiple DER assets are present behind one ICP, or batteries alter export capacity depending on operating mode.

2. Interaction with hosting capacity, network limits and local constraints:

Peak-time injections can have both positive and negative effects on distribution networks. In some locations, additional export may help manage peak demand; in others, particularly in low-demand or voltage-sensitive areas, it may exacerbate voltage rise or thermal loading.

A rebate mechanism that encourages peak-time export could therefore:

- place pressure on areas already approaching hosting-capacity limits
- increase the need for export-limiting or constraint management
- create incentives that do not always align with local network conditions.

We encourage the Authority to ensure the rebate framework recognises and accommodates local network constraints, existing export-limiting methodologies, and the evolving hosting-capacity guidance being developed across industry.

3. Data availability, measurement, and verification:

Implementing the definition will require reliable access to:

- verified connection capacity information
- inverter or generation-capacity data
- interval metering for export measurement.

Not all distributors hold generation-capacity data in a structured form today. To avoid misclassification or disputes, it would be useful for the Authority to clarify:

- what information distributors may reasonably rely on (e.g., ICP Registry data, installer documentation, metering provider datasets, customer declarations)
- how data inconsistencies should be resolved
- whether transitional arrangements are required to allow distributors to refine and validate their records.

4. Implementation timing and readiness:

The proposed start date of 1 April 2026 presents a very tight implementation window. Distributors will need to update classification processes, internal systems, metering and data flows, and retailer interfaces, as well as verify connection-capacity and generation-capacity information for potentially large numbers of ICPs.

Given the level of system and process change required, the sector will have limited time to implement these updates in a consistent and low-risk manner. A short transitional period—or a staged commencement that allows distributors to progressively classify ICPs and validate data—would materially reduce implementation risk and help ensure a smooth and equitable rollout across all networks.

5. Interaction with Demand Flexibility and DER Initiatives:

New Zealand is rapidly developing its consumer flexibility and DER integration frameworks—including EEA’s work on export-limit methodologies, LV/MV connection guidance, inverter-settings alignment, and the results emerging from trials such as FlexTalk.

The proposed rebate sits within this broader context. To maximise system-wide value, it will be important that:

- flexibility signals do not conflict between market mechanisms and network needs
- incentives for export complement, rather than undermine, hosting-capacity management
- distributors retain the ability to manage local constraints safely and consistently.

We encourage continued alignment between this rebate proposal and the wider flexibility and DER workstreams being considered by the Energy Competition Task Force and industry partners.

Conclusion

The EEA supports efforts to enhance consumer participation and flexibility in the electricity system. To ensure the proposed definition of a “small business” is workable and technically robust, it is important that implementation is clear, practical, and aligned with network engineering and safety considerations.

We would welcome the opportunity to engage further with the Authority and the Task Force as the detailed implementation is developed.

Contact

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