Carbon Neutral NZ Trust

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May 2026

To: Electricity Authority (EA)
distribution.pricing@ea.govt.nz

Subject: Submission on Reforming Distributed Generation (DG) Pricing

With the focus on Climate Change, the charitable Carbon Neutral NZ Trust (CNT) fully supports the general electrification of New Zealand based on renewable energy sources. However, electricity pricing and affordability (especially for low income users) are of great concern.

The intention to balance the distribution pricing with costs paid by domestic generators not so high that they discourage people from investment and not so low that they shift too many costs onto everyone else is appreciated.

Another main concern is the free-riding of large solar and wind farms' use of the line network at the expense of consumers.

However, the whole electricity pricing system needs to be reformed.

1. The Value of Connection and Shared Maintenance

CNT acknowledges that the distribution network is a common asset. The ability for domestic users to export energy—even at low buy-back rates—is only possible because of the infrastructure maintained by the lines company. We agree that maintenance costs should be shared; however, the transparency of how these costs are allocated and billed is currently insufficient.

2. Transparency in Billing: Fixed vs. Volumetric Line Charges

Currently, line costs are embedded within both fixed daily fees (listed) and volumetric (per kWh) retail prices (without transparency).

- **The Problem:** Because line costs are partially "hidden" within the Gentailer's invoice, it is difficult for consumers to see what they are paying for "surge readiness" versus "energy volume."

- **Recommendation:** The EA should mandate that retailers clearly unbundle invoices. Domestic generators in the Far North (already paying ~$88/month fixed charge) need to see exactly how much of their volumetric rate is the "line charge." If the domestic user is paying for the network via both a high fixed fee and a volumetric load, any additional "DG impact fee" constitutes triple-charging.

Carbon Neutral NZ Trust

[redacted]

May 2026

3. The Reality of Domestic "Surges"

We acknowledge that even households with significant storage (e.g. our Trustee's 15KW panels with 58kWh batteries) may still contribute to a "surge factor" when feeding into the grid during peak sunshine (when batteries are full). While total "justice" in pricing is impossible to calculate perfectly, the lines company must account for the fact that these users also provide a service by absorbing their own demand during national peaks and thus reduce line requirements.

- **A "Maintenance Inclusive" Fee:** We argue that the existing daily line charge should be explicitly defined as covering "maintenance and surge readiness." If current fees are insufficient, they should be adjusted transparently rather than creating a new, complex category of DG-specific penalties. Likewise, the now mandatory rebates to DG from lines companies via gentailers neither provides transparency nor guarantees their complete amount getting passed on.

4. Large-Scale Generation and the Marginal Pricing Flaw

The Far North is now a significant energy producer. Between **Top Energy's Ngawha Geothermal (57MW)** and **Lodestone's Kaitaia Solar (20MW)**, the region produces surplus energy for local needs.

- **The Inequity of Wholesale Pricing:** Because all energy is sold into the national wholesale market at a price set by the most expensive marginal unit (often gas or coal), Far North residents do not see the price benefits of their local, low-cost geothermal and solar production. Rather, Northland consumers are charged with a proportion of lines to the South Island. It is invisible how large is the portion caused by national line charges.

- **Corporate Accountability:** We expect clarity on how commercial solar plants like Lodestone contribute to the network. Beyond their **upfront capital connection costs**, they must contribute to the **ongoing maintenance of the local and national grid** they use to transport energy to their nationwide corporate clients like The Warehouse. It is unacceptable for domestic users to subsidize the infrastructure for a commercial PPA (Power Purchase Agreement).

Carbon Neutral NZ Trust

[redacted]

May 2026

5. National Context: Smelters and Data Centres

New Zealand's energy policy appears to prioritize large industrial users over households in energy hardship:

- **Tiwai Point:** The aluminum smelter consumes ~12–15% of national supply at a heavily subsidized rate (reported near 8c/kWh), while Far North residents pay over 35c/kWh.

- **AI Data Centres:** As NZ prepares for massive AI data centre investments (as noted in *The Spinoff*, 15/05/26), the strain on the grid will increase. These high-usage projects must bear the cost of grid upgrades. Domestic distributors in Far Northshould not be the one invoiced to "future-proof" the grid for Silicon Valley's data needs.

6. Energy Hardship in the Far North

The Far North has the highest electricity prices in NZ and the lowest average household incomes.

- **Pre-paid Metering:** While exact local figures for pre-paid card usage are held by retailers, national data suggests that regions with high Māori populations and low decile ratings have the highest reliance on these systems. In the Far North, this often means that if a family cannot afford to pre-pay more to their cards, they are simply without power for essential cooking, heating, hot water etc.

- **Off-Grid Risks:** The EA's proposed pricing may push those who *can* afford it to go entirely off-grid. This leaves the remaining "line costs" to be borne by the most vulnerable who remain, leading to a "death spiral" for the local network's financial viability.

7. Final Recommendations

1. **Transparent Unbundling:** Mandatory gentailers' invoices to show exactly what portion of the per-kWh price and daily fee goes to "Line Maintenance/ Surge Readiness."

2. **Volumetric Fairness:** Acknowledge that because domestic distributors pay a fixed line charge and line charge *per unit* of electricity they buy, they are already contributing to the network's volume-based costs.

3. **Commercial Ongoing Fees:** Large-scale commercial generators must pay **ongoing network usage fees in addition to their upfront capital**

Carbon Neutral NZ Trust

[redacted]

May 2026

connection costs, ensuring they do not "free-ride" on the community-funded grid.

4. **Support for "Tech Returns":** We support the move by lines companies to "return power to the people" via tech upgrades (*Newsroom*, 06/05/26) and suggest that DG pricing should reward households that utilize smart tech to manage their own impact.

5. **Reform the whole electricity pricing system:** The present wholesale price system based on the highest production cost is absurd and leads to unjustified profits for gentailers.

6. **Increase of threshold for ownership of generation by distributors from 50MW to 200MW:** We wish to highlight the critical importance of the Government's (MBIE) decision to increase the arm's length threshold from 50 MW to 250 MW, as cross-referenced in Paragraph 2.34 of this consultation. For the Far North, this is a transformative opportunity. It allows our local lines company, Top Energy, to potentially operate as a retailer. We submit that the EA's pricing reforms must be designed to support this shift, allowing community-owned distributors to deliver 'wholesaler gains' directly to their shareholders/consumers, thereby providing a structural solution to the Far North's energy poverty."

7. **EV batteries and "plug-in balcony solar panels":** Enable households to use EV batteries for internal import/export to avoid separate batteries and the use of "plug-in balcony solar panels", both of which have been permitted in several countries since several years.

8. Your questionnaire: Further to our above submission points, we have endeavoured to provide answers to your questionnaire below.

Ngā mihi

Rolf Mueller-Glodde & Inge Bremer

-Trustees -

Carbon Neutral NZ Trust

[redacted]

May 2026

Responses to the questionnaire:

1. Do you agree with the background and context summary? Why? Is there additional background?
No. It omits the regional socio-economic reality. In the Far North, we have the lowest incomes and highest electricity prices in NZ. The context must include "Energy Hardship" and the "Death Spiral" risk: if domestic solar becomes too expensive due to fees, those who can afford it will go off-grid, leaving the most vulnerable to pay for the remaining network costs.
2. Do you agree there are workability challenges with defining incremental costs?
Yes. Incremental costs are often used as a "black box" by lines companies. The challenge is distinguishing between costs caused by *new* generation versus costs caused by *legacy* maintenance failures (e.g., the Transpower pylon collapse in June 2024).
3. Do you agree current DGPPs cause costs/benefits to be underallocated to injection?
Partially. While large commercial injections (e.g., Lodestone 20MW) may under-contribute to transmission, domestic solar (which usually includes a value transfer to the retailer via low buy-back rates) actually *over-contributes* to the system's financial health.
4. Do you consider it remains appropriate to regulate injection pricing methodologies?
Yes. Without regulation, monopolies (lines companies) will naturally shift costs onto the least powerful group: domestic consumers. Regulation is essential to ensure "fairness," not just "efficiency."
5. Do you consider that consumers should remain residual payers? Why?
No. This assumes households should always "pick up the tab" for grid costs that exceed generation fees. Large-scale commercial generators (selling to national entities like The Warehouse) and upcoming industrial loads (AI Data Centres) should be the primary residual payers for grid expansion, not low-income households.
6. Reform the incremental cost rule to a "reasonable estimate"?
Disagree. "Reasonable estimate" is too vague and subjective and allows lines companies to inflate "potential" costs of surges to discourage domestic competition. It should remain strictly evidence-based or at least define ‘reasonable estimate’ having regard to all available evidence including …..'
7. Do proposed amendments support efficient pricing?
Not necessarily. "Efficiency" often ignores "Equity." Pricing is only efficient if it doesn't cause grid defection (people going off-grid), which ultimately makes the grid *less* efficient and more expensive for those left behind.

Carbon Neutral NZ Trust

[redacted]

May 2026

8. Non-prescriptive, enabling approach to capacity pricing appropriate?
Only if transparent. High fixed daily charges (like the ~$88/month paid by our Trustees) must be recognized as already covering capacity readiness.
9. Extension of the pioneer scheme for load connections?
Yes. This prevents a "first-mover disadvantage" where the first person to install a local solution pays for the whole neighborhood's upgrade.
10. Should pioneer schemes cover network injection?
Yes. Community-funded batteries or solar arrays that provide local resilience should be compensated if others later benefit from that localized grid stability.
11. Do proposed non-discriminatory pricing requirements improve confidence?
Only if enforced. We need a "Consumer Advocate" specifically for DG users to ensure that domestic generators aren't being charged more than commercial generators for the same "impact."
12. Agree with application provisions (opting out, retrospectivity)?
No on Retrospectivity. Consumers who invested in solar/batteries based on a specific 10-year ROI calculation should not have the rules changed halfway through. Retrospectivity destroys investor confidence.
13. Agree with proposed commencement provisions?
No. A longer transition period is needed for regions like the Far North to ensure that "rent-to-buy" battery models can be established to mitigate the new costs.
14. Suggestions to support successful implementation?
Mandate that retailers "unbundle" invoices. Consumers must see exactly what is a "line charge" and what is "energy." Transparency is the only way to get buy-in.
15. Suggestions for effective monitoring/reporting?
The EA should publish a yearly "Regional Equity Report" showing how much profit lines companies are making from domestic solar exports versus what they are charging those same users in fees.
16. Give distributors wide discretion on capacity charges?
No. In the Far North, Top Energy is exemplary, but other lines companies may use "discretion" to block renewable competition. National standards are safer.
17. Bespoke approach for larger connections?
Yes. A 20MW solar farm (Lodestone) is a commercial business and should have a bespoke contract that reflects its commercial use of the lines. Domestic users should have a prescriptive, low-cost "Safe Harbor" rate.
18. Specific guidance for distributors?
Guidance must include a **"Battery Credit."** If a household has a battery (e.g., 58kW), their "capacity charge" should be significantly lower because they do not "surge" the grid.

Carbon Neutral NZ Trust

[redacted]

May 2026

19. Inconsistent treatment of transmission charges for large projects distort investment?
Yes. Currently, large projects can "free-ride" on infrastructure built for the public, distorting the market in favor of corporate profits over community energy.
20. View on best option to address connection charge distortion?
Large commercial generators should pay an **ongoing usage levy** that is funneled back into the local network to lower the fixed daily charges for domestic consumers in that region.
21. Restriction on recognizing transmission benefits reconsidered?
Yes. If domestic solar/batteries help Transpower avoid a multimillion-dollar pylon upgrade, that benefit *must* be shared with the consumers who provided the solution.
22. Other matters to take into account?
- The "Gentailer" profit model. The gap between 8c (buy-back) and 35c (retail) is where the "network cost" is already being paid. This must be acknowledged.
- Of critical importance is the Government's recent decision to increase the arm's length threshold from **50 MW to 250 MW.** For the Far North, this is a transformative opportunity. It allows our local lines company, Top Energy, to potentially operate as a retailer. We submit that the EA's pricing reforms must be designed to support this shift, allowing community-owned distributors to deliver 'wholesaler gains' directly to their shareholders/consumers, thereby providing a structural solution to the Far North's energy poverty.
23. Comments on consumer impact analysis?
It likely underestimates the impact on "energy-poor" households. A 5% increase in fees might be "efficient" to an economist, but it is a "disconnection risk" for someone on a pre-paid card.
24. Agree with objectives of the proposed amendment?
Partially. We agree with "efficiency," but we disagree that domestic generators are the cause of the current "inefficiency."
25. Do benefits outweigh the costs?
No. The administrative cost of implementing complex "injection pricing" for small households will likely exceed the actual network benefits, while causing significant social harm.
26. Is the amendment preferable to other options?
No. A better option is to **incentivize batteries** through subsidies or low-interest "Green Loans," which solves the technical "surge" problem without punitive pricing.
27. Does it comply with section 32(1) of the Act?
Questionable. Section 32(1) requires the Authority to promote competition and reliability. Punitive pricing for domestic solar *reduces* competition by making it harder for households to compete with big power companies.

Carbon Neutral NZ Trust

[redacted]

May 2026

28. Preferred high-level settings consistent with pricing principles?
No. They lean too heavily toward "cost recovery" for monopolies and not enough toward "equity" for low-income regions.
29. Consolidating pricing methodology into Part 6B?
Yes. Clarity and a "single source of truth" are always helpful for transparency.
30. Comments on the drafting?
The drafting should explicitly include a **"Community Equity Clause"** that prevents lines companies from charging higher fees in regions already identified as "High Energy Hardship."