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Tēnā koutou

SUBMISSION ON DISTRIBUTED GENERATION PRICING PRINCIPLES ISSUES PAPER

Unison Networks Limited (**Unison**) is an electricity distribution business operating in Hawke's Bay, Taupō and Rotorua. Centralines Limited (**Centralines**) is a distributor operating in Central Hawke's Bay.

We thank the Electricity Authority (**Authority**) for inviting feedback on the proposed Distributed Generation Pricing Principles (**DGPP**) and we support the intent of the review to update the regulatory arrangements for distribution price signals for distributed generation (**DG**) to drive more efficient investments in DG.

We acknowledge the Authority's objective is to:

- Support more efficient DG where it provides benefits
- Enable all New Zealanders to reap the benefits that DG brings, such as reduced congestion, strengthened security of supply, and lower prices
- Address the issue that the current limit on distributors recovering more than incremental costs from DG may prevent efficient planning for future connections and exacerbate 'first-mover disadvantage'
- Improve the regulatory framework so it can better realise the potential of DG to operate for the long-term benefit of all New Zealanders

1. Summary

Unison and Centralines support a **comprehensive overhaul** of the Distributed Generation Pricing Principles (DGPPs) and endorse the Authority's preferred **Option 4** as outlined in the consultation paper. The existing DGPPs are misaligned with the 2023 Transmission Pricing Methodology (**TPM**), leading to potential inefficiencies and suboptimal investment decisions. While the cost structures for connecting distributed generators to the national grid versus a local distribution network may differ, the underlying principles guiding these charges should remain consistent.

DGPPs should also align with the Energy Competition Task Force (ECTF) Initiative 2A, which proposes that distributors offer peak export rebates to mass-market consumers based on the benefits their generation provides to the network at specific times and locations. Extending these principles to DGPPs would ensure that exports helping avoid network investment

receive appropriate incentives, while those imposing additional costs face appropriate charges.

Furthermore, DGPPs should adhere to the **2019 Distribution Pricing Principles**, with the exception of residual charges, which should not be allocated to distributed generators to avoid disincentivising investment. The proposed Option 4 should adopt a principles-based approach as part of an **expanded set of distribution pricing principles**, with oversight mechanisms such as disclosure and scorecards to ensure transparency. This approach should also address potential conflicts of interest, particularly where distributors invest in generation while also managing connections to local networks.

The initial rationale for codifying DGPPs within the Electricity Industry Participation Code (EIPC) was to provide certainty and prevent unfair pricing by EDBs The current DGPPs have arisen from earlier policy and regulation that had the **specific intent to incentivise connection** of DG to local distribution networks—hence, they only allowed incremental costs to be passed on rather than allocation on a benefits and service-based approach. However, as the electricity market evolves, **DG and load pricing principles should be treated equally**, with both being guided by principles **outside the Code** to maintain flexibility. While we oppose **Option 3**, which removes DGPPs altogether, we believe that having well-defined principles outside the Code would help balance contractual relationships and mitigate power imbalances between generators and EDBs.

We agree with Electricity Networks Aotearoa (**ENA**) that enduring principles should remain outside the Code to allow for adaptability. Additionally, given that TPM is still in transition, it is essential that any DGPP changes also allow for a sufficient transition period to avoid market disruption.

2. Alignment with TPM principles

Unison and Centralines believe that DGPPs must align with TPM to support efficient investment where it benefits the network most and delivers the greatest value to end consumers by minimising overall system costs. Given that the TPM is the outcome of an extensive and robust consultation and development process, it provides a well-founded approach to cost allocation for network connection and usage.

Key TPM Charge Structures & Their Application to DGPPs:

- Connection Charges: Fully allocated to parties directly using connection assets, including generators, distributors, and large industrial consumers. DGPPs should apply connection charges based on the same cost principles as TPM.
- Benefits-Based Charges (BBCs): Allocated to all parties based on modelled private benefits before investment is made. A similar approach should be incorporated into DGPPs to ensure efficient cost allocation and investment signals.
- Residual Charges: Applied only to load customers to avoid distorting generation investment decisions. This principle should be preserved within DGPPs.
- Transitional Charges: Designed to smooth the transition to benefits-based and residual charging frameworks, avoiding sudden price shocks. A similar approach should be considered for DGPP implementation.

 Nodal Pricing: Already rewards distributed generators for reducing constraints on the national grid. DGPPs should complement this by ensuring that distribution-level pricing reflects network impacts accurately.

Applying These Principles to EDBs:

- Initial/One-Off Connection Charges: Should be based on net incremental costs, considering revenues from ongoing connection and benefits-based charges.
- Ongoing Connection Charges: DGs should pay connection charges reflecting the direct costs of their connection assets, similar to generators on the national grid. This approach is already partially implemented under Part 6 of the Code.
- Benefits-Based Charges for DGs: A DGPP overhaul should introduce a benefitsbased charging framework, incorporating modelled future costs due to DG-driven system growth expenditure and providing rebates where DG defers investment needs.
- Mitigating First-Mover Disadvantage: If a DG-driven upgrade benefits future generators, a structured charge system should smooth cost step changes, ensuring fairness in cost allocation.
- **Shared Distribution Costs:** As with TPM, DGs should not pay for shared distribution costs unless they receive a direct private benefit from a network investment.
- Avoided Cost of Distribution (ACOD): ACOD payments should be removed and replaced with a benefits-based rebate system driven by Long-Run Marginal Cost (LRMC) analysis, ensuring incentives are tied to actual network benefits. Consideration should also be given to how these rebates are treated in regulatory disclosures and compliance reporting to ensure consistency with revenue calculations under DPP5.

3. Legacy of government policy behind DGPP codification

Investment in distributed generation has historically been encouraged through government policy initiatives aimed at fostering private sector participation. The Energy Corporation Act 1987 marked the first major step, followed by the Electricity Industry Reform Act 1998, which promoted competition and expanded DG investment. The regulation on pricing at the time provided incentives for distributed generation to connect to local networks. However, by the early 2000s, concerns arose regarding high connection costs and unfair pricing by EDBs, leading to the introduction of the Electricity Governance (Connection of Distributed Generation) Regulations 2007. These regulations established DG pricing principles to ensure fair connection charges and prevent discrimination. The form of the principles implemented in 2007 and later transferred to Part 6 of the Electricity Industry Participation Code (EIPC) (incremental cost only) was a continuation of the earlier regulation designed to incentivise DG connected to local networks. Later, these principles were incorporated into Part 6 of the EIPC under the Electricity Industry Act 2010.

While codification may have been necessary at the time, **market conditions have since evolved**. Distribution pricing principles sit outside the Code, while DGPPs remain within it and are misaligned with TPM's treatment of grid-connected generators. To ensure fairness, **DGPPs should be governed by principles outside the Code**, allowing for greater adaptability while maintaining a consistent approach to cost allocation.

4. Conclusions

Unison and Centralines support a comprehensive overhaul of DGPPs to ensure alignment with the 2023 Transmission Pricing Methodology (TPM), fostering efficient investment and equitable treatment of distributed generation. A principles-based approach, sitting outside the Code, would provide the necessary flexibility to adapt to evolving market conditions while maintaining consistency with the Energy Competition Task Force (ECTF) Initiative 2A. DGPPs must also align with the 2019 Distribution Pricing Principles, ensuring cost-reflective pricing without unduly discouraging distributed generation investment. As TPM already applies a benefits-based framework to transmission, introducing a similar structure for DGPPs, where charges reflect the actual impact of distributed generation on network costs, would create a more efficient and fair pricing system. The removal of ACOD, replaced by a benefits-based rebate, would ensure that generation exports are incentivised when they provide network benefits while discouraging exports that create additional costs. Additionally, a transition period is crucial, considering TPM itself is still in transition. The historical rationale for codifying DGPPs within the Electricity Industry Participation Code (EIPC) was to provide investment certainty and prevent unfair pricing by EDBs. However, with the electricity sector evolving, pricing principles should now be treated consistently across generation and load. By shifting DGPP principles outside the Code, while maintaining clear guidelines for contracts and network agreements, the sector can better support innovation, cost efficiency, and fair access to the network.

No part of this submission is confidential, we acknowledge it will be published. Please do not hesitate to contact us for further information including on operational requirements.

Nā māua noa, nā

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