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Electricity Authority
PO Box 10041
Wellington 6143

Submitted via email to distribution.pricing@ea.govt.nz

Issues Paper – Distributed Generation Pricing Principles

Introduction

1. Orion welcomes the opportunity to submit on the consultation paper 'Distributed Generation Pricing Principles.'[1]

2. Orion owns and operates the electricity distribution infrastructure in central Canterbury, including Ōtautahi Christchurch city and Selwyn District. Our network is both rural and urban and extends over 8,000 square kilometres from the Waimakariri River in the north to the Rakaia River in the south; from the Canterbury coast to Arthur's Pass. We deliver electricity to more than 229,000 homes and businesses and are New Zealand's third largest Electricity Distribution Business (EDB).

Executive summary

3. Orion submits in support of Option 2 (limited modification), or Option 4 (comprehensive overhaul), with a preference for Option 2. Option 2 provides an opportunity to address a specific issue with the incremental cost limit, while maintaining the stability of the existing regulatory framework. However, we note that the Electricity Authority ("Authority") has not provided sufficient detail regarding how Option 4 would be implemented, making it difficult to fully evaluate the proposed approach.

4. In our view, one of the most significant issues with the current DGPPs is the lack of clarity in the definition of "incremental cost" and then how it applies in practice. This ambiguity creates inconsistency across the sector and creates challenges when negotiating connection contracts with distributed generation (DG) customers. Additionally, any revised principles should recognise the differences between sub-transmission (HV), distribution (MV), and low voltage connections, as their pricing needs, reinforcement requirements and operating circumstances differ substantially – and a "one size fits all" approach to pricing may be inappropriate.

5. We are concerned about an apparent inconsistency in the Authority's approach to connection pricing across its various workstreams. Recent consultation papers appear to simultaneously suggest that EDBs are under-recovering costs for DG connections,[2] while over-recovering costs for load connections[3] – positions that seem to contradict each other without clear supporting evidence.

[1] Distributed Generation Pricing Principles
[2] Electricity Authority, Distributed generation pricing principles, page 9, paragraph 2.9.
[3] Electricity Authority, Distribution connection pricing proposed Code amendment.

6. This inconsistency is particularly evident in how the Authority frames EDB incentives. In the Network Connections consultation paper, the Authority explicitly states that "*the absence of specific Code requirements allows distributors to prioritise other work over applications to connect load.*"[4] Yet in the DGPP issues paper, the Authority asserts that EDBs aren't sufficiently incentivised to dedicate resources to DG connections despite these requirements being in the Code, because "*the incremental cost limit yields weak incentives to dedicate resources to DG*."[5]
7. This creates a perplexing regulatory position where EDBs are simultaneously criticised for not prioritising load connections because requirements aren't in the Code, while also being criticised for not prioritising DG connections despite requirements being in the Code.
8. We believe this contradiction stems from the Authority misdiagnosing the root cause of EDB operational constraints. The Authority appears to interpret resource challenges as priority issues – when they primarily reflect financial constraints within the Commerce Commission's price-quality regulatory framework. Price-quality regulated EDBs operate under strict allowances for operational expenditure, creating necessary trade-offs in resource allocation that cannot be resolved through additional Code obligations without corresponding financial mechanisms.
9. We have reviewed the consultation paper, and our specific responses to the questions posed by the Authority, as well as other feedback we consider appropriate to the consultation, are set out in Appendix A.
10. Orion supports the ENA's submission in principle.

Concluding remarks

11. Orion supports efforts to improve the Distributed Generation Pricing Principles to better reflect the current market context and facilitate efficient integration of distributed generation. Our preference is for Option 2, which would address specific definitional and implementation issues while maintaining the stability of the existing principles.
12. We appreciate the opportunity to provide feedback on this consultation and look forward to engaging further as the Authority advances this work.
13. This submission is not confidential and can be publicly disclosed.
14. If you have any questions or queries on aspects of this submission which you would like to discuss, please contact us on 03 363 9898.

Yours sincerely,

Connor Reich

Regulatory Lead – Electricity Authority

[4] Network connections project - Stage 1 amendments, page 50, paragraph 5.141.
[5] Distributed Generation Pricing Principles, page 13, paragraphs 2.31 – 2.34.

Appendix A: initiative 2A

Submitting organisation	**Orion New Zealand Limited ("Orion")**
Contact person	**Connor Reich**

Questions	Orion feedback
Q1. Do you have a view on the definition of incremental cost that is contained in the Code? Should it be more tightly defined to include only network costs and to exclude consequential costs relating to factors such as frequency keeping and voltage support? Would this lead to more timely generation build and lower energy costs?	Orion submits that the current definition of incremental cost lacks sufficient clarity, creating inconsistent application across the sector. We support the Authority better defining this term and developing clear guidance on what costs are included and excluded. However, Orion submits that we do not necessarily support excluding all consequential costs. Where it comes to power quality (e.g. harmonics and voltage) and frequency keeping, the Connection Agreement with the connecting party should include a charge for these aspects, if the connecting party is deemed to be the causer. For DG connected under the Code's regulated terms, especially small-scale DG like residential solar PV, a different solution may be required. When issues arise from multiple DG connections (such as voltage management challenges in areas with clustered PV installations), the current incremental cost limit prevents EDBs from implementing appropriate cost recovery mechanisms for costs that should be shared to remediate these issues.[6] Orion submits that greater definitional clarity would lead to more efficient connection processes, potentially accelerating generation deployment. However, excluding legitimate costs could transfer these costs to other consumers, undermining the overall efficiency of the system. Orion submits that the transmission pricing methodology (TPM) appropriately allows for allocation of shared costs amongst users, while in contrast the DGPPs restrict such allocation by ensuring DG is only charged for reasonable additional costs directly attributable to their specific connection. As noted in the consultation paper,

[6] In these scenarios, an EDB might need to allocate costs for remediating network issues that no single DG connection caused individually but resulted from their collective impact. Regarding appropriate cost recovery mechanisms, Orion suggests exploring whether these issues are best addressed through DG-specific delivery services charges. The Australian Energy Regulator has developed export tariff guidelines, which include both a positive charging component (or a cost) to signal where exporting energy will drive future network investment, and a negative charging component (or a rebate) to signal where the network would benefit from exports.

Questions	Orion feedback
	this creates an uneven playing field for DG compared to grid-connected generators.[7] Regarding *"would this lead to more timely generation build and lower energy costs,"* we caution against the simplistic view that EDB connection processes are the primary barrier to generation deployment. Orion submits that the Authority's framing in recent consultation papers appears to repeatedly position EDBs as blockers without considering the broader context. Current delays in generation build could be driven by multiple factors outside EDB control, which may include factors such as: 1. Resource Management Act requirements; 2. Applicant access to capital and financing; 3. Supply chain constraints for equipment; 4. Legal review process; 5. On-shore labour shortages for specialised technical work; and 6. Generation investment decisions by gentailers and independent power producers. Orion submits that more precise incremental cost definitions may marginally improve the overall connection process, but this represents only a small portion of the overall timeline for generation deployment. Achieving material acceleration in generation build would likely require addressing the potential broader systemic challenges rather than focusing exclusively on distribution connection pricing.
Q2. Do you agree with the problems with the incremental cost limit identified in this section? Why or why not? Do you have a view on the relative importance of the problems identified?	Orion submits that we agree with the problems identified in the issues paper. We note that our ability to effectively resource for DG applicants (both technically and in terms of personnel) is significantly impacted by the costs we can recover. Orion submits that the Authority's characterisation of first-mover disadvantage is oversimplified. The dynamic is highly context dependent, with some scenarios demonstrating first-mover advantage instead. For example, in a recent scenario with a connecting party on our network, the first applicant faced fewer requirements compared to subsequent applicants. In this scenario, the first applicant did not need to include other applicants in the Wide Area Protection Study (WAPS), due to the other applicants' position in the queue. This resulted in the first connecting party needing to install less network equipment compared to subsequent connecting parties.

[7] Distributed Generation Pricing Principles - Issues Paper, pages 10 – 11, paragraphs 2.12 – 2.18.

Questions	Orion feedback
	Orion submits that the Authority should consider recent research from the UK, which found that a "*just in time approach to network build is no longer fit for purpose*" and risks becoming a "*blocker to the energy transition and a constraint to growth*."[8] This directly relates to the issue identified in the paper that "*investors in new assets are discouraged from accommodating future demand*." Network planning and investment approaches need to evolve beyond incremental cost-based models to support the energy transition effectively.
Q3. Do you agree circumstances have changed significantly since the DGPPs were introduced, including that there are now far fewer impediments to distributed generation than in the early 2000s?	Orion submits that while certain aspects of the market have evolved significantly since the DGPPs were first introduced, and technological advances have reduced the costs of DG and lowered barriers to entry, this assessment is nuanced. The market dynamics show that DG developers are exhibiting what might be described as a "gold rush" mentality – prioritising speed to market over connection costs. The costs an EDB charges typically represent a minor portion of developers' connection costs compared to the potential wholesale market revenues. However, we are only beginning to see grid-scale customers connecting to EDB networks in significant numbers. This means we are still in the early stages of determining whether the DGPPs are effectively functioning in this context. The application of the principles to larger-scale DG presents fundamentally different challenges than those encountered with smaller installations. The current DGPP structure does not appear to be materially impeding DG installations overall. Other factors such as resource consent processes, equipment availability, and access to capital are likely more significant barriers at present. Yet, as the volume and scale of DG applications continue to grow, the structural limitations of the DGPPs may become more apparent and potentially problematic.
Q4. Do you agree with the assessment of the current situation and implications of incremental cost pricing? If not, why not? What if any other significant factors should the Authority be considering?	Orion submits that we broadly agree with the assessment of the current situation and implications of incremental cost pricing.

[8] National Infrastructure Commission (2025) Electricity distribution networks: Creating capacity for the future, page 39.

Questions	Orion feedback
Q5. Do you agree these are the appropriate options to consider?	Orion submits that the four options presented provide a reasonable spectrum of potential approaches. However, we note that Option 4 (comprehensive overhaul) lacks sufficient detail to fully evaluate its merits. While we support the concept of a comprehensive review, we would need to see more information about how the Authority envisions the revised principles before fully endorsing this approach. As noted in our executive summary, we prefer Option 2 (limited modification) as it would address specific issues while maintaining the stability of the existing principles.
Q6. Are there other options the Authority should consider for improving rules about costs that can be recovered from distributed generators?	Orion supports the ENA's submission, and agrees that the Authority should seek to move towards consistency in its approach to pricing and pricing principles. Orion submits that any future option to improve rules around costs that can be recovered from DG should acknowledge the varying network benefits provided by different DG configurations. For example, solar combined with battery storage represents a significant improvement over solar alone in terms of network benefits. EDBs should be allowed to incentivise DG connections that provide greater network benefits through appropriate pricing mechanisms. This would encourage technological solutions that enhance network resilience and efficient capacity utilisation rather than treating all distributed generation equivalently regardless of its actual contribution to network performance.
Q7. Will new aggregator business models emerge to solve the problem?	Orion submits that while aggregators may play an important role in the future electricity system, they address a fundamentally different issue than the cost allocation and recovery challenges that the DGPPs are designed to address. The Authority's Option 3 suggests potentially replacing pricing principles with reliance on contracting mechanisms, including aggregator models. This approach appears to conflate two distinct aspects of DG integration: (1) fair allocation of network costs driven by DG connections, and (2) procurement of network services from DG operators through commercial arrangements. Aggregators primarily facilitate the second function - enabling DG to provide valuable network services at specific locations and times. However, they do not inherently solve the underlying cost allocation issues, such as how to appropriately assign connection costs, shared infrastructure costs, or ongoing management expenses related to establishment of DG connections.

Questions	Orion feedback
	Orion submits that it's too early to tell whether aggregator business models will emerge in a way that adequately addresses the cost allocation and recovery issues identified in this consultation. It would be premature to rely exclusively on this approach as a solution to the problems with the incremental cost limit. Orion submits that if the Authority identifies aggregators as having a pivotal role in any potential solution, then aggregators may need to be included in the Electricity Industry Participation Act and Code as Participants to ensure the solution is implemented appropriately, and that there is sufficient regulatory oversight.[9]
Q8. Are distribution price signals alternative to, or complementary to contracting?	Orion submits that the Authority should view price signals and contracting as complementary, rather than alternative, approaches. Price signals, flexibility markets, and flexible connection products each play distinct but complementary roles: 1. **Price Signals** provide broad, market-driven incentives for DG owners to align generation and consumption with network conditions once connected. 2. **Flexibility Markets** enable explicit procurement of flexibility services from DG, demand response, or storage, allowing for targeted, location-specific solutions. 3. **Flexible Connection Products** offer structural solutions by providing conditional or curtailed export capacity in exchange for faster or lower-cost grid connections. Together, these mechanisms ensure that DG can integrate efficiently into the network, balancing cost, reliability, and operational efficiency.[10]
Q9. Which, if any of the above options, do you consider would best support efficient pricing for recovery of distribution costs from DG?	Orion submits in support of Option 2, as it provides an opportunity to address specific issues while maintaining the stability of the current principles. Option 4 could be a viable option, but we would need to see further details before fully endorsing this option.

[9] Orion has previously raised the need for the Authority to consider including aggregators in the Code. Please see our submissions on Energy Competition Task Force Proposal 2A, Part 8 Code amendment proposal Part 1, Addressing common quality information requirements and Code Review Programme #6 for further details.

[10] For further information on work that Orion is delivering in the flexibility space, please refer to our Innovation webpage for details on Resi-Flex and Lincoln Flex (discontinued).

Questions	Orion feedback
Q10. Do you agree with the Authority's tentative view on a solution? In particular: • **Should efficient price signals be sent through a revised set of pricing principles?** • **Would voluntary guidelines or mandating through the Code be the best approach?** • **Should we rely on the distribution pricing principles outside the Code or codified new pricing principles for DG? Why?**	Orion submits strongly in support of keeping the DGPPs as principles, outside of the Code, to allow for greater flexibility and adapt to evolving market conditions.
Q11. Are there any unintended consequences from removing the existing DGPPs? • **Do you agree with the risks we have identified, and our assessment of them?** • **Do you think there are any other risks we should consider associated with the removal of the DGPPs?** • **Do you have any information that would allow the Authority to better assess such risks?**	No comment.
Q12. Do you agree market and regulatory settings provide efficient incentives for DG reducing or avoiding transmission costs? What, if any, other significant factors or options should the Authority consider?	Despite theoretical arguments about transmission benefits, the practical reality is that EDBs continue to face transmission costs regardless of DG penetration.[11] Orion submits that we believe the Authority should consider the scale of the DG in its assessment on whether current market and regulatory settings provide efficient incentives for DG reducing or avoiding transmission costs:

[11] Orion notes that the Authority amended the Code to remove avoided cost of transmission (ACOT) payments. As outlined in Network Tasman's submission on Energy Competition Task Force initiative 2A, ACOT payments demonstrated "*substantial economic inefficiencies – estimated at around $33 million annually – by encouraging investment in distributed generation that provided minimal network value*."

Questions	Orion feedback
	• Grid-scale connecting parties, who intend to dispatch to the grid from an EDB may provide benefits to the wider system. However, these are primarily captured through wholesale market mechanisms rather than through transmission cost reductions. • DG applicants connecting to a distributor's network, who potentially do not export to the grid, but could provide local resiliency or support community-owned energy projects, would not have an impact on the grid, and thus should not be incentivised to reduce or avoid transmission costs that they cannot influence.