Distributed Generation Network Pricing

SUBJECT:	Response to Electricity Authority consultation paper dated 2 April 2026 titled 'Reforming network pricing for distributed generation to promote efficient investment'
DATE:	7 April 2026
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Q1: Background and context

Q1. Do you agree with the background and context summary above? Why? Is there additional background, evidence, or context relevant to the proposals in this paper?

When considering policy relating to DG the EA may find it helpful to acknowledge a distinction between DG that is fundamentally load-related and DG that is stand-alone.

Load-related DG is primarily for the purpose of serving co-located load, with the injection capability being ancillary to this primary purpose. Rooftop solar PV is the classic example, but stationery or vehicle-to-grid battery storage will also become increasingly prevalent. It is reasonable for mass market electricity consumers to expect to host these types of distributed energy resources with *reasonable* opportunity to inject surplus to the public network regardless of where they live or do business. Our community might expect that the associated costs and benefits are *reasonably* consistent across installations with similar technical attributes in similar locations, regardless of who was first or last.

Stand-alone DG is primarily for the business of injecting energy to the public network. The technology, location, and size are selected by a developer to optimise the economics of electricity generation or storage. There is not the same moral compulsion to ensure that every location can support this kind of injection or that costs are consistent between projects. Socialisation of costs is less appropriate, sharp and predictable economic incentives are important, connections are typically governed by contracts setting out explicit long-term expectations, and it is accepted that developers are competing and that there will be winners and losers.

Q3: Under-allocation under current DGPPs

Q3. Do you agree the current DGPPs cause costs and benefits to be under-allocated to injection connections, which can cause the issues listed above? Why?

I have not observed this under-allocation but must acknowledge this is based on only a small subset of connections.

My impression is that incremental cost is already treated as an anchor and that over the last four years EDBs have already become more sophisticated in identifying and capturing the full scope of incremental costs.

I have observed greater contention in agreeing what costs are necessary to properly facilitate a connection than in interpreting the meaning of 'incremental cost'.

Q4: Necessity of regulating injection pricing

Q4. Do you consider it remains appropriate to regulate injection pricing methodologies? Why?

Yes. The reasons set out at 4.4 of the consultation paper are a good summary, and notably the challenges the consultation paper refers to as 'hold-up risk' and 'inefficient risk transfer' are real (notably in the 'stand-alone DG' context).

Q5: Appropriateness of incremental cost principle for DG

Q5. Do you consider that consumers should remain residual payers? Why? Are there any additional economic concepts that should be considered in our reform of the DGPPs?

Yes. In addition to the explanations provided by the EA in the consultation paper, it is helpful to acknowledge that distribution networks exist fundamentally for the purpose of serving offtake. This is different from transmission, which has the fundamental purpose of connecting injection and offtake.

In a hypothetical system that started with only large high-voltage transmission-connected loads and generators, it is hard to imagine the advent of solar PV or other modular generation technologies giving rise to a distribution network. In other words, DG is by nature an opportunistic augmentation of distribution systems, not their reason for being.

Q6: Incremental cost reframing

Q6. Do you consider that reframing the incremental cost rule to a requirement that charges 'must reflect a reasonable estimate of' rather than 'must not exceed' incremental costs is appropriate? Why?

As noted earlier I observe that incremental cost is already treated as an anchor rather than a cap, and in this sense the proposed change is acceptable. However, I would encourage the EA to consider:

- Asymmetry of information and control between EDBs and customers could mean that removing some sense of a cap leads to charges systematically exceeding actual incremental cost. In effect the change could replace under-recovery risk with over-recovery risk that is potentially more damaging to overall system efficiency.
- One way to address this could be to compel transparency about how charges have been calculated, in the form of itemised cost build-ups. The process of disclosure could prompt an EDB to review the reasonableness of its charges and, if necessary, provide customers with the information to challenge charges.
- In a situation where charges are set at a level that turns out to be materially different to actual cost, the existing DGPPs allow for correction through washup. The proposed reformulation appears to make it more difficult to correct a material error.

Q7: Workability and scope amendments

Q7. Do you consider that the proposed amendments to language and framing would support more efficient pricing? Why?

Existing DGPP wording 'costs that an efficient distributor would incur' creates an obligation for some measure of cost discipline, because it implies that if the EDB was to act in an inefficient manner then the customer could object to bearing the associated cost. Proposed replacement wording 'reasonably identifiable distribution costs' appears to remove the sense of cost discipline. Notably, the word 'reasonable' qualifies only the identifiability but ought to apply to the costs themselves.

Q8: Capacity pricing

Q8. Do you consider that a non-prescriptive, enabling approach to capacity pricing is appropriate at this stage? Why?

More prescription may be required to ensure that any capacity pricing doesn't conflict with the incremental cost principle.

4.20(a) proposes that EDBs could allocate costs as network injection capacity is consumed. It would be helpful for the EA to clarify its intent please: Is it suggesting that an EDB can levy a capacity charge for network investment that is not yet required but that the EDB anticipates could be required if injection grows in the future?

To create a simplified example: suppose a certain street with 20 houses is served by distribution network with capacity to serve only 10 solar PV systems and that making an upgrade to serve 20 solar PV systems would cost $100k. Is the EA proposing that when the first house installs solar PV the EDB could charge that customer a capacity fee – potentially $5k being one twentieth of $100k – on the basis the customer is using up injection capacity that will eventually need to be expanded?

If this reflects the EA's general intent, then there appears a significant risk of recovering more than incremental cost. The hypothetical street might never install enough solar PV systems to require the anticipated upgrade, or the upgrade could occur so far into the future that the anticipatory capacity charges over-recover. The disincentive of the capacity charge could mean nobody on the street installs solar PV, which would be an inefficient outcome.

It would be more appropriate for charges to be limited to costs actually incurred by the EDB. In the simplified example, installation of the 11th solar PV system should trigger both the investment and the recovery of that cost from customers. Whether the recovery is socialised across all injection customers or borne entirely by the customer that triggers the upgrade, depends on the context as follows:

In a load-related DG context there may be a reasonable moral case for the cost to be shared/socialised across a group of similar injection customers, rather than just to the 'last straw' customer.

In a stand-alone DG context it is more appropriate to allocate cost to the 'last straw' customer that directly triggers it, with pioneer schemes providing the possibility of relief for a first mover. Otherwise, what the EA refers to as 'free' capacity may not be used, which

makes the electricity system less efficient, and it may lead to 'last straw' DG connections that are fundamentally uneconomic going ahead because part of the cost is socialised.

Q12: Application provisions

Q12. Do you agree with the proposed application provisions, in particular with regard to opting out, retrospectivity and secondary networks? Why?

The EA should reconsider whether it is necessary and appropriate to apply the new DGPPs to existing connections with negotiated connection contracts. This is likely to apply to a relatively small number of connections of the 'stand-alone DG' character and for which connection charges are calculated individually (rather than through published tariffs).

Whilst the consultation paper argues for consistency between old and new connections at 4.47, it is also important for DG investors to have reasonable confidence in the contracts they enter. A change to the DGPPs could signal that certain DG projects are uneconomic, that signal is unhelpful if an investor has already committed based on different information. Investors accept 'change of law' provisions in contracts with an expectation that regulators will only trigger these provisions when there is a strong necessity to do so.

If the EA was prepared to carve out historic negotiated connection contracts, then a suitably narrow definition of the carve out could be that the new DGPPs do not apply to injection connections that (i) have charges governed by negotiated connection contracts, (ii) are the subject of an initial application prior to the consultation date 2 April 2026, and (iii) are the subject of a final application prior to 1 February 2027.

Q21: Transmission benefits

Q21. Do you consider that the restriction on recognising transmission benefits should be reconsidered if the other proposed Code amendments are made? Why?

Yes, the restriction on recognising transmission benefits should be reconsidered.

With rising peak demand and new DG technologies it is more likely that DG will be developed with an express objective of mitigating transmission upgrades. For example, consider a dispatchable generator fuelled by biogas and located on the distribution side of a major urban GXP with the purpose of reducing peak GXP loading. It may be in the best interests of the EDBs customer base for the EDB to financially support this DG by passing on the avoided transmission costs.

Note that in this example nodal spot prices would only reward the DG's activity if the transmission serving the relevant GXP was regularly constrained such that the DG could set the nodal price, but a binding transmission constraint implies the urban load centre is suffering (or at great risk of suffering) lost load which is unlikely to be tolerable.

Q23: Impact analysis and the way it acts to inform understanding of incremental cost

Q23. Do you have any comments on the consumer impact analysis methodology or findings?

One of the stated reasons for reform is to clarify (and generally expand) the scope of costs that can be charged to DG, and some of the examples in appendix A of charges that could hereafter be treated as incremental injection costs are surprising.

Specifically, the scenarios in appendix A explore the idea of reallocating network-wide costs for vegetation management, routine maintenance, and service interruptions. These suggestions could be applied in a way that is inconsistent with the incremental cost principle. Further clarification of the EA's intent could be helpful. To explain, consider load-related DG and stand-alone DG separately.

Stand-alone DG: It is common for connection of stand-alone DG to require new or upgraded network assets. If those new or upgraded assets have ongoing costs associated with vegetation, maintenance, or interruptions (costs that would not be incurred if the DG was not connected) then the DG should pay those too. I would expect these types of costs are already understood to be within the scope of incremental cost, without the proposed Code changes.

Load-related DG: In theory one can imagine how DG could cause increased vegetation, maintenance or interruption costs, but harder to see how these would be sensibly ring-fenced for allocation to DG. For example, if an overhead line is upgraded because a certain street has lots of rooftop solar PV, does trimming the trees around that line go from being an offtake cost to an injection cost? What happens if those households then buy EVs such that they would have needed the upgrade even without the solar PV; does the network monitor this and then reallocate the street's tree trimming budget back to being an offtake cost?

In summary, the consultation paper's frequent reference to 'programmatic costs such as maintenance' and the calculations in appendix A indicate that this reform will lead to a material reallocation of maintenance costs from offtake to injection, but it is hard to see how this will occur in a way that is consistent with the incremental cost principle. It could be helpful for the EA to provide greater explanation of its intent or more concrete examples.