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INDEPENDENT ELECTRICITY GENERATORS ASSOCIATION

22 April 2025

Submissions
Electricity Authority
P O Box 10041
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By email: distribution.pricing@ea.govt.nz

Dear team,

Re: CROSS SUBMISSION Issues paper – Distributed generation pricing principles

The Independent Electricity Generators Association Inc. (IEGA) appreciates the opportunity to make this cross submission on the Electricity Authority's (Authority) proposed options to revise the incremental cost rule in the Distributed Generation Pricing Principles (DGPP) in Schedule 6.4 of the Code.[1]

Important context from the government's decision on distributor involvement in generation

The Authority's work on the DGPPs is now in the context of the government's decision there should be no limit on distributors' investment in generation connected to their own network or anywhere in New Zealand. MBIE's advice to Ministers has been proactively released under the OIA.

MBIE describe analysis of this policy intervention as "*The challenge is to encourage greater investment in generation without compromising competition*". MBIE's advice to Ministers included reliance on the DGPPs incremental cost rule (and regulated process for connecting distributed generation) to ensure even treatment of third party distributed generation investors after removing any restriction on distributors investing in generation:

> *"However, MBIE's analysis is that other rules in place in Parts 6 and 6A of the Electricity Industry Participation Code and Part 4 of the Commerce Act 1986 will provide sufficient protection against anticompetitive behaviour in the generation market and ensure that open-access for all generators continues."*
>
> *"With these rules in place the removal of Part 6A rules will not impact independent generators ability to connect to a distributors network."*[2]

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[1] The Committee has signed off this submission on behalf of members.
[2] Regulatory Impact Statement October 2024. Released 9 April 2025

IEGA cross-submission

The submissions on the issues paper clearly demonstrate there are different understandings and inconsistent approaches to the application of the DGPPs. There is also not universal support from the distribution sector to proceed straight to a 'comprehensive review' of the existing DGPP Code.

Individual submissions were made by twelve distributors. Of this subset of the distribution sector, the ENA and ten distributors supported the Authority's Option 4 of a comprehensive review of the DGPPs and articulated their preferred (pre-determined) outcome of this review before undertaking any further work.[3] However, a number of these distributors and the ENA also recommended defining the scope of any review before the work starts. The ENA submitted: *"However, it is difficult to recommend option 4 without seeing further details about where the Authority intends to take this, so we provide support with caution"*, and *"Given the lack of certainty and detail within the issues paper, we recommend that comprehensive engagement with EDBs and other stakeholders be undertaken in the development of the next consultation"*.

The IEGA strongly recommends a workshop with representatives from distributors, distributed generators, Transpower and the Authority[4] to discuss the following topics to assist in identifying the necessity for or scope of any further review. Identification of these topics and the proposed discussion draws on submissions made on the issues paper. In our view, these topics have been conflated by the Authority and distributors into a conclusion that the incremental cost rule is the problem and should be removed.

Our view is that these topics can be addressed individually, and a common understanding has the potential to alleviate any need for a 'comprehensive review' of the DGPPs. Our proposed workshop would be a much more efficient approach than proceeding with more 'propose and respond' steps.

We have identified the following topics, to be discussed in this order:

Topic 1: What size of DG should the DGPPs apply to?
Discuss / decide if applying the DGPPs/incremental cost rule to a subset of all DG makes a difference to distributors' views on/application of the incremental cost rule • Underlying assumption is the DGPPs/incremental cost rule applies to ALL DG connections (this is consistent with the ECTF distributor rebate proposal for a payment for avoided costs of distribution) • EA may be assuming the DGPPs/incremental cost rule should apply to customers whose primary reason for connection is generation (and not load) – EA to discuss • Orion suggested reviewing how the DGPPs apply between distinguish btw 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"*

[3] Wellington Electricity submitted the Status Quo is a valid option if the EA determines some of its other workstreams take priority. Orion's submission focused on clarifying the definition of 'incremental cost' and who / how the DGPPs apply between sub-transmission (HV), distribution (MV), and low voltage connections "which would address specific definitional and implementation issues while maintaining the stability of the existing principles.

[4] And potentially the Commerce Commission

Topic 2: What is the definition of 'incremental cost'?
Orion submitted that *"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"* (pg 1) The ENA submitted *"The strict incremental cost approach in the current DGPPs limits the ability of distributors to set cost reflective prices by not allowing them to recover the full costs that DG can impose on the network. These costs can include investments in network capacity, voltage management, monitoring, and protection schemes that are necessary to safely and reliably accommodate DG."* (pg 27) Discuss to come to a common understanding of what costs can be recovered under the incremental cost rule • Can the costs referred to by the ENA be directly attributed to accommodating DG? • Case studies: o Counties and Northpower describe how they have derived a c/kWh Export Charge for mass market and commercial DG to recover incremental costs • AER Export Tariff Guidelines – section 5 includes a clear methodology for recovering common costs[5] • Is the EA being consistent in its proposed approach to a connection pricing methodology for new load connections and the current review of the DGPPs? (ENA submission) Clarify that recovering the costs of processing connection applications is separate from the DGPP incremental cost rule. The EA could provide an update on its work to allow cost reflective connection application charges

Topic 3: Clarify TPM treatment of grid connected and distributed generation for Connection charges, Benefit-based charges (BBC) and Residual Charge
Counties submitted *"CEL's key concern for any new DG pricing framework is that it will need to: … allow grid-connected generators to compete on a fair and equal basis (eg. not distorted by inefficient price signals)"* (response to Q4) Discuss and come to a common understanding of whether DG is at a competitive advantage to grid connected generation because of the TPM Discuss the following as case studies (see some details in submissions): • Network Waitaki's situation with the proposed new GXP at Black Point • Connection of new DG to Horizon GXPs in TP's interconnected grid and to the TP's Waiotohe connection asset GXP • EA Networks input Note that DG greater than 10MW is exposed to charges under the TPM but grid connected generation is not exposed to charges from distribution networks

[5] AER Export Tariff Guidelines October 2024: "We consider that export charges should be based only on providing export capacity in addition to the network's intrinsic hosting capacity. This is because investment undertaken to provide the network's intrinsic hosting capacity was driven not by demand for the export service but by demand for the consumption service. That some portion of network capacity has come to be used to provide the export service is not a rationale for retrospective cost recovery through export charges. To be clear, costs incurred by distributors to provide their network's intrinsic hosting capacity (historical costs) should not be recovered through export charges.", page 12

Topic 4: Network expansion and investment in Anticipatory Capacity

Counties submitted *"The long-term implications are worse because the incremental cost limit results in a lower amount of DG being connected into New Zealand, which in turns means higher wholesale electricity prices for consumers. The lower amount of DG being connected is the result of EDBs not being incentivised to build network infrastructure to host greater DG capacity."* (response to Q4)
EA Networks submitted: *"Having been required to give existing capacity away free-of-charge, the cost barrier of upgrades is difficult to address. The incremental cost restriction led us to this situation, but removing it will not provide a resolution."* (response to Q4)
• Should the TPM treatment of First Mover Disadvantage Type 1 and Type 2 apply to distribution network investment?
    o DGPPs already address Type 1 (delete the 36-month timeframe?)
• Come to a common understanding of whether the incremental cost rule does or doesn't stymie efficient expansion of distribution networks
    o Counties and EA Networks explain their differing views
ENA to inform group about work on an alternative funding model for Anticipatory Capacity

Topic 5: Consideration of 'identifiable avoided or avoidable costs' as a result of connecting the DG (ACOD) and Non-Traditional Solutions (NNS)

• Is there a common understanding of what are 'identifiable avoided or avoidable costs' to enable a consistent approach across EDBs?
• Is there support for incentivising DG connections that provide greater network benefits through appropriate pricing mechanisms to encourage technological solutions that enhance network resilience and efficient capacity utilisation?
    o Unison/Centralines submitted: *"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"*
    o Powerco's negative \$0.05/kWh tariff for residential and small commercial customers and General 3 phase up to 63AMPs / 42kVA customers for 'Peak DG Winter' (from 1 April 2025) is available to ~348,000 customers. At ~25% of the TOU Peak Winter tariff and ~50% of the Controlled tariff for residential and small commercial customers (source)
    o Orion's Export Credit Policy (from 1 April 2025) *"Distributed generation that reliably generates during peak demand times can provide an economical alternative to electricity delivery and we provide export credits in recognition of this benefit to the network."*
• Discuss the role of Connection and Operation Standards and Connection Agreements in influencing the technical impact of DG on a network (eg voltage limits, Congestion Management Policy)
Why identifying and compensating for 'identifiable avoided or avoidable costs' in the incremental cost rule is different from contracting for NNS

Topic 6: Should the charging methodology align across sectors or assets?

Distributors and Transpower are recovering the costs of very similar assets/infrastructure. Should the recovery methodology be the same across transmission and distribution assets OR should the recovery methodology reflect the entities/sectors connected to those assets?

- Option to apply TPM methodology to recovery of distribution costs
  - proposed by Unison/Centralines[6] *"As with TPM, DGs should not pay for shared distribution costs unless they receive a direct private benefit from a network investment*".
  - proposed by Powerco:

    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 benefits-based 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.
- Proposal that pricing principles for distribution should be the same for load and generation – the flow of electricity is not relevant
  - Unison/Centralines submit the *"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"*
  - Horizon suggests a 'network use' principle, where EDBs *"allocate shared costs to ICPs based on their network needs (such as connection capacity, level of service) and not based on the direction of flow of electricity"* (response to Q2)
- Charge transmission grid connected generators for using the distribution network: Both distributed generation and transmission grid connected generation use the same service provided by distributors – that of transporting the electricity injected into the distribution network and delivering this electricity to ICPs – 12% and 88% market share respectively. If DG pays any more than incremental cost for using the distribution network this charge must also be paid by transmission grid connected generation. (IEGA submission)

[6] Entrust also submitted *"We consider that the Authority's increasing focus on dynamic efficiency at the distribution pricing level, including the use of LRMC pricing and rewarding solar for injection of electricity during peak periods, is at odds with its requirements for transmission pricing which are focussed on short-term allocative efficiency and making the charges fixed and unavoidable."* (page 4)

Our suggested workshop would be consistent with the Electricity Engineers Association feedback *"We encourage the Authority to continue engaging with technical experts and industry practitioners to test the feasibility of each option and ensure any reforms are practical, proportionate, and future ready"* (response to Q5). Along with the ENA, the IEGA *"encourages the Authority to keep an open mind as to the outcome of the review"* (ENA response to Q9).

For the avoidance of doubt, the IEGA's view continues to be that moving straight to an un-scoped 'comprehensive review' (Option 4) of the DGPPs is unwarranted. A thorough discussion of the topics we have outlined above should reveal if and where any amendments to the DGPPs, without changing the incremental cost rule, will enhance distribution network utilisation and deliver economic efficiency gains for the long-term benefit of consumers.

If after this workshop the Authority decides to proceed to a comprehensive review (Option 4), the Authority must be focused on maintaining a level playing field and competitive neutrality between distributed generation and transmission grid connected generation. Any charge to distribution connected generation that is above the incremental cost of connection will be a charge that is not being paid by transmission grid connected generators. Distributors do not invoice transmission grid connected generators for any of their costs associated with delivering 88% of the electricity consumed at ICPs.

We request the opportunity to discuss and progress our proposed workshop.

Yours sincerely

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Warren McNabb
Chair