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Requiring distributors to pay a rebate when consumers export electricity at peak times and distributed generation pricing principles

1. This is Vector's submission to the following consultations:
 - Energy Competition Taskforce 2A: Requiring distributors to pay a rebate when consumers export electricity at peak times; and
 - Distributed Generation Pricing Principles: Issues Paper

Requiring distributors to pay a rebate when consumers export electricity at peak times

2. We support the intent of the proposal to reward customers where they contribute reliably to reducing network peak and, as a result, reduce overall costs to all consumers in the long term.
3. Achieving this objective depends on the benefits of the proposal outweighing the costs of implementation, and that the benefits of contributing injection are passed on in some way to the relevant consumers.
4. The Taskforce's proposed approach – including high level principles in the Code supported by more detailed guidance outside the Code – is the best way to ensure distributors can design a rebate that reflects their network and customer circumstances.
5. We understand from the consultation document the proposed guidance would be subject to a separate consultation. Accordingly, we haven't provided detailed feedback on the indicative guidance at this stage. We agree that feedback on the guidance should be sought from stakeholders.
6. In terms of timing, we note the proposed implementation date of 1 April 2026 could be challenging given other constraints on distributor resources (including the Authority's proposed changes to connection pricing).

Comparison with network connection pricing consultation

7. We note this consultation has clear differences with the Authority's recent network connection pricing consultation.¹ As our response to that consultation highlighted, we have significant concerns with the Authority's approach to network connection pricing including its approach to the problem definition.
8. We have compared the differences in the two consultation papers below:
- **Problem definition:** The export rebates paper more clearly defines the problem and offers a targeted solution. It is also better aligned with regulatory precedent and adheres to orthodox economic concepts. Conversely, the connection charging proposal problem definition is vague, inconsistent and unsupported by evidence. It is also overly broad, failing to specify whether the issues relate to particular customer types or connections, such as charging point operators. Similarly, the connection charging proposal is novel and untested.
 - **Recognition of EDB diversity:** The export rebates paper acknowledges EDBs operate in diverse conditions and, appropriately, proposes a principles-based approach to reflect this diversity. In contrast, the connection charging proposal takes a more rigid approach, viewing any differences in charging methodologies across EDBs as an inherent problem and advocates for a uniform, one-size-fits-all methodology that applies to all 29 EDBs.
 - **Customer impact analysis:** The export rebates paper explicitly considers how different customer groups might be affected, particularly lower-income households that cannot afford solar panels. It recognises that poorly designed rebates could increase costs for some customers and incorporates this concern into its pricing principles. These principles are carefully structured to ensure rebates are applied sparingly and only in situations where they are most likely to reduce long-run network costs, benefiting all customers.
 - In contrast, the connection charging proposal appears to overlook the likely impacts on different customer groups. Most notably, it claims that existing customers would not have to shoulder a share of the costs of new connections, despite clear evidence to the contrary.
 - **Competition impacts:** The export rebates paper acknowledges the role of third-party aggregators in providing flexible contracting services. It explicitly considers how its proposals might affect competition at the margins and whether price-based and contractual flexibility can coexist.

¹ Electricity Authority, *Distribution Pricing Proposed Code Amendment: Consultation Paper* (25 October 2024)

- In contrast, the connection charging paper overlooks the potential harm to emerging competition in connection services. Most notably, it fails to recognise that setting upfront connection charges below the incremental cost of connection would make it impossible for ‘unaffiliated’ suppliers – those without existing contractual agreements with EDBs – to compete. The proposal therefore risks significantly restricting, or even eliminating, competition in the supply of these services. This is a major omission.
9. Although outside the scope of this consultation, we encourage the Authority to consider and address these differences as it continues network connection pricing project. If the consultation process is not well designed it is unlikely to result in an outcome that supports the long term benefits of consumers.

Durability of the proposal

10. For mass market consumers, we expect the main technologies injecting into the network at peak times will be batteries and V2G systems. Solar will typically generate outside peak (although there will be some exceptions and batteries are generally combined with solar).
11. There is currently only a small number of mass market consumers on our network whose injection would qualify and, at current levels, is unlikely to impact our network planning. This may change over time.
12. As explained in the consultation paper, *“flexible distributed generation, such as batteries, can reduce net peak demand by injecting into the network at peak times and offsetting consumption from other consumers on that part of the network. When this occurs routinely, it can reduce a distributor’s need to invest in additional network capacity as demand on the network grows. This reduces costs for the network, reducing costs for all consumers in the long run.”*²
13. For network benefits to accrue, there will need to be ongoing and consistent injection at peak times. It needs to be reliable, over a sufficiently long duration. Accordingly, durability will be an important consideration in designing the rebate (and for the Authority in implementing the principles and guidance).
14. Similarly, distributors will need to balance granularity with workability and price stability for customers. These considerations do appear to be reflected in the indicative guidance. As above, a principles-based approach (as proposed by the Taskforce) is the best way for distributors to manage these competing objectives in a way that best suits their consumers.

Ensuring the benefits accrue to all consumers

² At para 2.7

15. A key consideration in designing the rebate should be ensuring the benefits accrue to all consumers. For example, if the rebate is 'over-valued' compared to the actual benefits of injecting, this will leave existing consumers worse off.
16. Accordingly, the value of the rebate needs to be carefully balanced against the risk of cross subsidisation. The rebate is new so it is currently unknown what value targeted injection will bring in easing congestion. If the rebate overvalues targeted injection, consumers – particularly those who cannot afford solar and batteries – will be disadvantaged.
17. The indicative guidelines recognise the need to share expected cost savings between the distributor and the customer. This is critical to ensure network costs, and therefore overall costs for consumers, reduce over the longer term.
18. As recognised in the indicative guidelines, there will be times injection will contribute to, rather than reduce, network costs. Accordingly, we agree distributors should be able to cap the rebate over a certain capacity to avoid export congestion or voltage issues. We also agree distributors should be able to charge DG for injection at times and locations that increases future network investment costs.
19. We also note that a rebate, unless charged ex post, will expose consumers to forecast risk. In setting prices, it will be difficult for distributors to forecast the level of injection at peak (particularly given there is little history to base this forecast on). If distributors over-forecast the level of injection at peak consumers will be exposed to higher prices. There is a lack of industry guidance on an appropriate de-rating factor.
20. We recommend the Authority specifically consider potential impacts on vulnerable consumers and any interaction with the Authority's additional objective to protect the interests of domestic consumers and small consumers in developing the principles and guidance.

Engaging mass market consumers in load shifting, injection and investment decisions

21. Given the highly targeted nature of EDB payments under this proposal, it is important that the right value accrues to the right consumers. The Authority is right to monitor how and whether this is occurring.
22. We consider caution should be taken in messaging (from all stakeholders) to ensure the potential rewards from injecting are not oversold to customers. It is likely that in areas of the network facing no congestion there will be little or no network benefit so the rebate will not be available. Similarly, as congestion eases over time, the rebate may need to be removed to avoid disadvantaging existing consumers by providing an incentive that no longer provides network benefits.

23. It is important consumers considering investing in technology (e.g. solar and batteries) to take advantage of the rebate are aware this is the case. We are concerned about the potential for, e.g., third party vendors selling these systems to oversell the benefits to customers.

24. We also note the following comments in the consultation paper:

“Customers will generally choose the size of their DG investment in response to price signals; in other words, the size is based on what is most economic for them. Under the status quo, this may not align with what is optimal for the broader system. Essentially, because of this missing distribution price signal, some consumers may install a solar and battery system that can meet their own demand at peak times, but not have spare capacity to inject electricity into the network, even though there could be a benefit to the distribution network of doing so (alongside other potential benefits).”³

25. We are concerned about the potential to encourage customers to invest in DG over their personal requirements. This could become an issue if the injection price for their area is fleeting. Over time, if too much injection from DG or batteries begins to create costs for distributors, then this may lead to that injection creating (and accruing) *charges*, rather than benefits.

Distributed generation pricing principles (DGPP)

26. The Authority has identified a number of areas where the application of the incremental cost limit in the DGPPs is leading to poor outcomes for consumers.

27. We agree that restricting distributors to charging DG only incremental costs is leading to negative consumer outcomes. Distributors cannot charge DG their share of common costs which unduly favours DG and ultimately results in higher prices for all consumers.

28. We consider the environment for DG has significantly changed since the introduction of the DGPPs with much more uptake of DG and the introduction of new business models such as third party aggregators. Accordingly, it is appropriate to revisit the DGPPs.

29. We strongly support removing the incremental cost limit and allowing distributors to charge DG a fair share of common costs.

30. Accordingly, we are supportive of the Authority’s preferred option to comprehensively overhaul the DGPPs and replace them with a new set of pricing guidance (Option 4). As a caveat, the success of this option will depend on the content of the new guidelines which the Authority intends to develop at a later date.

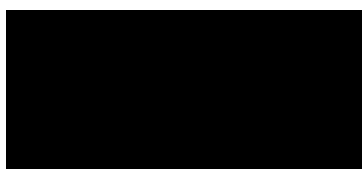
³ At 4.9

31. We understand that under this option distributors would have flexibility in how they signal costs to DG (provided it is consistent with principles and guidance) and would allow common costs to be shared with DG. We consider this would best support pricing efficiency.
32. We do not consider there is significant risk that distributors would not follow the principles or guidance if located outside the Code. The Authority could monitor compliance and, if it found distributors were not complying, impose further prescription.
33. We are also supportive of option 3: removing the DGPPs and relying on contracting for similar reasons.
34. We consider retaining flexibility around pricing will best support the long-term benefit for consumers by allowing networks and customers to agree the most efficient approach in their particular circumstances and allowing distributors to adapt their approach as necessary (e.g. as network visibility improves).

Consistency with transmission pricing

35. We do not consider that future transmission costs are appropriately signalled for DG. There are currently a large number of future transmission projects planned for the Auckland area, including new GXPs, and none of the costs of these projects are visible to consumers (or, largely, any party other than Transpower). There is no signal of these costs in backwards-looking TPM charges, or in the nodal prices in Auckland, which of course are blind to the costs of new transmission investment.
36. The removal of the RCPD charge means there is no equivalent signal for injection that would reduce peaks). Accordingly, connecting parties do not have visibility in terms of *future* transmission charges, and there is no ability for distributors to signal those future transmission costs in their charges, or in rebates.
37. We consider efficiency would be better supported if new transmission costs were also signalled consistent with the Authority's proposed approach to distribution.

Yours sincerely



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