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Keston Ruxton
Manager, IM Review
Commerce Commission
By email: regulation.branch@comcom.govt.nz

Dear Keston

Submission on emerging technology pre-workshop paper: 30 November 2015

1 This is Vector's submission on the Commerce Commission's (Commission) consultation paper: "Input methodologies review – Emerging technology pre-workshop paper" dated 30 November 2015 (pre-workshop paper). It also covers matters discussed at the Commission's workshop held on 14 December 2015. Nothing in it is confidential. For further information, or to discuss anything in this submission, please contact:

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Executive Summary

2 The key points of this submission are:

- While it was important for the Commission to test the adequacy of the current cost allocation methodologies in regard to emerging technologies, it will be equally as important to address the other issues identified by the Commission in regard to emerging technologies, those of asset stranding and the adequacy of incentives during the remainder of the IM review.

- The current cost allocation methodologies are fit for purpose. There is no issue with the regulatory allocation of costs and revenues in response to emerging technologies that needs to be addressed as part of this IM review.

- The IM review is not the appropriate forum to air concerns about whether EDBs should be restricted from investing in certain emerging technologies. In any event, restrictions on any potential participant in emerging technology markets will be undesirable as it is likely to inhibit development of nascent markets.

Areas of focus for the remainder of the IM Review

3 The Commission has identified three key areas of focus for the IM Review in the context of emerging technologies.[1] The workshop and pre-workshop paper address the third of these, that is, the regulatory treatment of cashflows from emerging technologies.

[1] Pre-workshop paper, paragraph 11.

4 While there is merit in testing the regulatory treatment of cashflows in light of emerging technologies it will be just as important to address the remaining two emerging technology issues identified by the Commission, that is the risk of asset stranding and in particular the adequacy of investment incentives, neither of which were within the scope of either the workshop or the pre-workshop paper. It is extremely important that now the regulatory treatment of cashflows has been considered that the IM review now focuses on incentives to ensure the right investments are made so as to "promote the long-term benefit of consumers…*by promoting outcomes that are consistent with outcomes produced in competitive markets*".

5 Electricity networks have traditionally not had much scope for value-added service, and the regulatory focus has tended to be on minimising the cost of delivering a standard service to consumers. The technologies we now see emerging suggest the regulatory focus should shift from cost-minimisation to *value-maximisation*, as distributors are increasingly in a position to offer consumers added value and choice through innovation. Traditional views of how the benefits of innovation are shared between regulated suppliers and consumers will need to shift to reflect the increased risk to suppliers of these investments, and the increased benefits to consumers which result from them.

The cost allocation input methodologies are fit for purpose

6 The Commission's stated aim for the workshop and the pre-workshop paper is to answer the question: "Is there a current or future problem with the regulatory treatment of the revenues and costs associated with emerging technology investments in the electricity distribution sector?"

7 Vector considers that there is no current problem with cost allocation input methodologies. It is impossible to know whether some future technology may challenge current cost allocation methods. However, Vector at present does not foresee any development in the context of currently evolving technologies that will not be able to be managed under the principles-based approach of the current allocation methodologies.

8 While emerging technologies by definition are new, the current principles for cost and revenue allocation can as easily be applied to the cost and revenues arising from the new technologies as they have been to more traditional technologies. Vector agrees with the Commission that it is an asset's *use* rather than its location or technical configuration that will be key to determining cost allocation.[2]

9 EDBs are presently able to identify in most cases what the appropriate cost allocation is and we would expect this to continue to be the case in regard to emerging technologies. In any circumstances where it is not clear, specific guidance can be sought from the Commission.[3] We do not consider that changes to the existing rules are required to cater for emerging technologies as part of this IM review.

Comments on scenarios

10 The scenarios provided by the Commission were useful for determining that the current cost allocation methodologies are fit for purpose. They also challenge the

[2] Pre-workshop paper, paragraphs 57-67
[3] i.e. via the Commission's "Process for Amendments and Clarifications of Part 4 Determinations" dated 8 March 2011

industry to begin to clarify its thinking about how these technologies will be adopted into existing commercial and regulatory structures.

Scenario 1 – EDB-owned battery in the distribution network

11 We agree that the Commission has correctly classified the potential costs and revenues it has identified in the pre-workshop paper as regulated or unregulated, as applicable. However, the scenario does raise the question of how grid-scale batteries will be charged and discharged, which may be different from what is described in the scenario

Scenario 2 – Consumer-owned and controlled battery

12 We agree that any benefit to the network in this scenario is incidental at most, and therefore none of the associated costs or revenues fall within regulated activities.

Scenario 3 – EDB-owned and controlled battery on the consumer's premises

13 In this scenario, the primary purpose for installing the battery is described as reducing the consumer's energy bill. While that would be the primary purpose under scenario 2, when it is the EDB owning and controlling the battery the primary purpose is far more likely to be to achieve network benefits. That is, Vector considers it unlikely that an EDB would install and control a battery on a consumer's premises for the primary reason of reducing that consumer's energy bill.

14 However, if the consumer had installed solar PV, or was on a time of use (or similar) retail plan, it is unlikely that using the battery for network management purposes would not as a consequence also decrease the consumer's energy bill.

15 If the scenario is amended to reflect what is more likely i.e. the battery being installed behind the meter for network management purposes, then the EDB's costs would be regulated.

Matters arising from the workshop

16 The discussion at the workshop indicated that the potential for market development arising from emerging technologies is significant, but that the boundaries between regulated and competitive markets are moving as alternatives to traditional lines services are increasingly accessible.

17 While this does not change our analysis of the workability of the cost allocation methodologies, we were concerned at the shared view among large electricity retailers that EDBs should be restricted in their use of certain emerging technologies such battery storage technologies. The motivation for this view appeared to be a concern with the way markets for competitive services might develop over time, rather than a specific concern with services regulated under Part 4 of the Commerce Act.

18 Batteries may be used to supply a range of services some of which may be regulated and others unregulated. However, it does not seem controversial that where battery technology is used to defer greater capital investment in conventional lines infrastructure and/or provide higher levels of quality to consumers that these uses clearly relate to the lines services regulated under Part 4.

19 A key concern for electricity retailers appears to be EDBs will be able to monopolise the potentially competitive markets by leveraging market power from markets in which they provide natural monopoly services. Whether this concern is validly held will depend on a full assessment of the available evidence, which has not been presented as part of the Commission's input methodology review, nor should it given that it is not relevant to the input methodologies themselves.

20 It is important to note that competitive markets are governed by Part 2 of the Commerce Act. Any claim of an abuse of an anti-competitive advantage needs to be assessed on its merits within that legal framework.

21 In any case, we have not been able to understand the supposed advantage that Vector or other EDBs may gain from providing regulated lines services:

- The ability to roll capital assets into the RAB only applies to the extent that assets are used to provide regulated services. Where the asset is used to supply competitive services, there is no RAB 'protection'.

- Even if this were not the case, the 'protection' offered by the RAB is more apparent than real. The RAB does not guarantee a return. There is simply permission from the regulator to recover up to the amount invested. Whether expenditure on battery assets can be fully recovered is a commercial risk that all businesses take.

- Quite by contrast to the view that regulation confers some type of cost advantage is the reality that a regulated WACC limits the potential upside return on any investment that supplies regulated services. This is one of the main concerns that the current review needs to address – that the limited upside available to regulated businesses may not be sufficient to compensate for the risk of long-term investment in emerging technologies. Unregulated businesses such as electricity retailers have a distinct advantage because they do not face these upside restrictions.

22 We do not believe that restricting EDB use of battery storage technology will promote the development of competitive markets associated with that technology. On the contrary, it is likely to inhibit it. Restrictions on use of particular technologies will act as a disincentive to EDBs to invest in them at all, encouraging continued investment in traditional infrastructure which will likely be to the overall dis-benefit of consumers.

23 In any event, it is good regulatory policy to regulate only if, and to the extent, necessary. Without clear evidence of need for regulatory intervention, these nascent markets should be allowed to develop with as wide a pool of potential participants as possible. Existing regulatory requirements for cost allocations and related party transactions are fit for purpose in the context of market participation by regulated EDBs.

Yours sincerely
For and on behalf of Vector

Richard Sharp
Head of Regulatory