



**Vector Limited**  
101 Carlton Gore Road  
PO Box 99882, Newmarket  
Auckland 1149, New Zealand  
[www.vector.co.nz](http://www.vector.co.nz)  
Corporate Telephone  
+64-9-978 7788  
Corporate Facsimile  
+64-9-978 7799

24 June 2014

Submissions  
Electricity Authority  
Wellington

Sent by email to: [submissions@ea.govt.nz](mailto:submissions@ea.govt.nz)

### **TPM working paper: connection charges**

1. Vector welcomes the opportunity to provide a submission on the Electricity Authority's (Authority) consultation paper *Transmission Pricing Methodology: Connection Charges, Working paper* (Consultation paper), dated 6 May 2014. This submission is not confidential.
2. Vector endorses the submission by the Electricity Networks Association on this topic.

### **Efficiency of ARC-based charges**

3. Vector broadly agrees with the conclusion reached by the Authority in its October 2012 TPM issues paper – that the current market-like charging arrangements for connection are generally efficient.
4. However, the Authority appears to be shifting its view and now considers that there is a case for more substantial reform to the connection charging regime within the TPM.
5. The Authority notes that current connection charges are recovered from Transpower's customers on the basis of average depreciation of all assets in the connection pool (average replacement cost, or ARC). The Authority notes that this approach averages the rate of depreciation across all assets in the connection pool, which has the effect of flattening connection pool charges across each asset's life. The Authority raises some concerns about this, including:

- a) ARC-based charges create stranding risk as customers pay less up front.
  - b) Customers using older connection assets are cross-subsidising customers using newer connection assets.
  - c) Under ARC charges there is no “step-change” in costs when an asset is replaced. If there was such a step-change then customers would have better incentives to scrutinise/challenge investment proposals.
6. The Authority’s assessment of the issues with ARC charging, in summary, seems to be that ARC charging is likely to increase the overall cost of connection assets.
7. Vector is unconvinced by this view. The issues identified may be *potential* problems. However, regulation should not be introduced to address problems that may only exist in theory. For regulation to be justified, it would need to be demonstrated that (a) these problems actually exist; (b) they are having a material effect and (c) the proposed solution would deliver net benefits. The Consultation paper does not do this. Nor has the Authority sufficiently assessed the complexity, cost and negative consumer outcomes of the changes being considered.
8. We are also not convinced that even in theory the current connection pool arrangement is inefficient.
9. Importantly, it is very unlikely that the saw-tooth depreciation profile the Authority suggests is efficient represents the optimal way of charging for connection assets. It is a product of the straight-line depreciation that is applied to Transpower's RAB under its IPP (i.e. it reflects the regulatory costs of the investment). However, it is unlikely to reflect the SRMC and LRMC of the assets over time.
10. It is implausible that a saw-tooth pattern would reflect the value consumers place on the asset over time (e.g. the value to the consumer of the asset is unlikely to fall by 50% over half of its life). In practice, we expect there to be little difference in the service provided over an asset’s life; and the value to consumers from the asset may increase as demand increases over time. If the service provided by the asset did not remain broadly consistent (i.e. deteriorates) this in itself may well be a (efficient) reason to replace the asset. An increase in maintenance costs over the asset’s life does not change this picture.
11. We make the following additional comments on the Authority’s analysis:
- a) The use of a DRC approach would increase price volatility. It is our experience that consumers generally prefer price stability and they may not welcome the outcomes of DRC-based charges.

- b) Pricing on the basis of DRC sets charges for a particular asset that are high when the asset is new and low when the asset is old and needing replacement. As utilisation of the asset will often increase over time it is not clear that this is in any way efficient.
  - c) It is not necessarily accurate to characterise the current methodology as including a “cross-subsidy” unless some users are paying less than incremental cost (which is a requirement for there to be a cross-subsidy).
  - d) As Grid Reliability Standards (GRS) investments are scrutinised by the Commerce Commission (Commission), it is not clear that additional scrutiny or challenge by consumers would have a material effect on the Commission’s decisions regarding GRS proposals. We are also not aware of any evidence that the Commission has approved inefficient investment proposals from Transpower.
12. Finally, Vector agrees with the Authority that changing the connection charge approach is likely to increase administration costs.
13. In conclusion, we do not believe there would be any dynamic or allocative efficiency benefits to be obtained by changing the connection charges for connection assets to reflect their straight-line depreciation profiles. We do not support a change from the current approach of using ARC-based charges at this time.

#### **Possible cross-subsidisation of operating expenses in the connection pool**

14. Currently operating expenses included in connection charges are based on cost allocators rather than the actual cost incurred for each connection customer. The Authority considers that an actual cost-based methodology is a more efficient way of allocating Transpower’s operating expenses to connection customers.
15. Vector submits that the Authority may have underestimated the costs involved in allocating operating expenditure costs to individual assets rather than through cost allocators. The complexity and system costs involved in such an activity are likely to be substantial. We are also not convinced that the benefits would be noticeable.

#### **Connection costs within the interconnection pool**

16. The Authority raises a concern that the difference in cost recovery of connection and interconnection assets creates incentives for parties to have connection assets inefficiently configured as interconnection assets to avoid the associated charges.

17. Vector agrees that this may be a problem in theory. However, to demonstrate that it is a problem justifying regulation, it would need to be clear that:
  - a) Parties are seeking to have connection assets classified as interconnection assets;
  - b) This is inefficient;
  - c) This is having a material effect on market outcomes; and
  - d) There is a solution available that would deliver net benefits.
18. Vector does not believe the consultation paper demonstrates any of these points. The reference to Meridian's Project Aqua does not appear to be evidence that this problem did occur, merely that it might have – and in any case the project was not progressed. It is our understanding that where potential for inefficient connection of a transmission loop has arisen parties have avoided it through contractual means. As a result, there is no sign of a problem that needs to be resolved.

### **Staged commissioning of transmission assets**

19. The Authority has expressed a view that the current TPM "does not explicitly deal with the potential implications of the staged commissioning of transmission assets and parties may seek to inefficiently reclassify connection assets at interconnection assets (for example, by seeking exemptions)".<sup>1</sup> This view is informed by a recent application for an exemption from the TPM by Transpower in relation to assets associated with the NAaN project.
20. The Authority states that it declined the exemption application because: "a loss in the short term operational efficiency from declining the exemption was likely to be small or negative, the promotion of future investment efficiency was the greater consideration in terms of overall efficiency of the electricity industry for the long term benefit of consumers."<sup>2</sup>
21. Vector does not see evidence that parties are seeking to inefficiently classify connection assets as interconnection assets due to ambiguity regarding the staged commissioning of investment assets. As set out in our submission on the draft decision to reject the exemption application<sup>3</sup> the NAaN assets are interconnection assets and were not at any time connection assets – i.e. their engineering

---

<sup>1</sup> Consultation paper, paragraph 1.17.

<sup>2</sup> Consultation paper, paragraph 6.17.

<sup>3</sup> Vector Limited, *Submission on the Authority's Draft decision on NAaN exemption application*, 1 October 2013, paragraph 14.

specifications and the Electricity Commission's approval of the investment proposal was on the basis that the assets were interconnection assets. The staged commissioning of those assets does not change these facts. It is also not at all clear how a decision to grant the exemption would have had an impact on future investment efficiency.

22. In considering this issue it is important to consider the context of the decision of the Electricity Commission when it approved the investment. The investment was approved as an interconnection asset because that is its long term function and hence the driver of its economic value. Revisiting that decision in light of short term commissioning choices is inappropriate and inconsistent with the national net benefit test used as the basis for investment approval.
23. Further, commissioning assets when they are ready rather than delaying commissioning until all assets are built has operational, security and market benefits and is of negligible cost to consumers. Any intermediary stages that may arise due to the nature of the construction process are not driven by distributor demands.
24. We also note the staged commissioning of an interconnection asset is an event that we do not expect to occur very often. As such, there may not be a pressing need for specific changes to the TPM to address the issue. Also, as the Authority is aware, Vector has applied for a declaratory judgement regarding the correct interpretation of the TPM on this issue. This judgement would override any new policy by the Authority, so we see little need to develop any new policy at this time.

### **Contact details**

25. If you require further information please contact me on 04 803 9038 or at [bruce.girdwood@vector.co.nz](mailto:bruce.girdwood@vector.co.nz).

Kind regards,

A handwritten signature in blue ink that reads "B Girdwood".

Bruce Girdwood  
**Group Manager Regulatory Affairs**