

3 March 2020

Submissions  
Electricity Authority  
2 Hunter Street  
Wellington  
**By email to: [tpm@ea.govt.nz](mailto:tpm@ea.govt.nz)**

Vector Limited  
101 Carlton Gore Rd  
PO BOX 99882  
Auckland 1149  
New Zealand  
+64 9 978 7788 / [vector.co.nz](http://vector.co.nz)

## **Transmission Pricing Methodology 2019 Issues Paper: Supplementary Consultation**

1. This letter sets out Vector's submission on the Electricity Authority's (the Authority's) supplementary consultation on proposed amendments to the 2019 Issues Paper (the Issues Paper) on the Transmission Pricing Methodology (TPM). We begin with some general remarks, followed by a discussion of the four specific amendments proposed in the supplementary consultation paper.

### **General remarks**

2. As we noted in our submission and cross-submission on the Issues Paper, Vector continues to have significant concerns with the proposed TPM reform. Based on the submissions received, it was clear that our concerns are shared with stakeholders across the industry and in all regions of New Zealand. Indeed, only a handful of submitters were fully supportive of the TPM proposals in the Issues Paper.
3. Considering these concerns, it is disappointing that the supplementary consultation focuses only on four second-order points and has not addressed any of the major issues identified by stakeholders in the original consultation, such as:
  - The re-allocation of sunk grid investment costs via a benefit-based (BB) charge
  - The allocation of residual charges to load customers only, and
  - The technical challenges associated with implementation of BB charges for future investments.

The Authority has also failed to engage with (or even acknowledge) the alternative, more incremental reform options recommended by Transpower<sup>1</sup> and the Lantau Group.<sup>2</sup>

4. The amendments in the supplementary consultation not only fail to address respondents' key concerns with the Issues Paper, but in fact would make matters worse. We are particularly concerned at the proposal to allow applications for prudent discounts based on a purely

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<sup>1</sup> Transpower, *Submission: Transmission pricing review 2019 issues paper*, 1 October 2019, pp.12-13.

<sup>2</sup> The Lantau Group, *Review of Transmission Pricing Guidelines Issues Paper 2019*, 1 October 2019, pp.7-8.

hypothetical measure of standalone cost. This appears to be another attempt to re-engineer the TPM to deliver a price reduction to New Zealand Aluminium Smelters (NZAS) at the expense of other grid-connected customers. While we strongly oppose this proposal, Vector has already begun investigating its own bypass options in case the amendment is implemented. We believe there will be options that meet the standalone cost test and would be eligible for a prudent discount under the revised criteria.

5. We note that the Authority is planning to consult further on two other key issues – the cost-benefit analysis and peak charging – in a forthcoming publication. While this is welcome, we would strongly encourage the Authority to broaden its focus to include the many other issues identified by stakeholders during the previous consultation round and the alternative reform options presented.

### **Prudent discount policy (PDP)**

6. We strongly disagree with the proposed amendment to the PDP, which would effectively allow transmission users to apply for a discount on their charges based on a purely hypothetical business case for grid bypass. This amendment is clearly designed to make it easier for NZAS to apply for a prudent discount based on the estimated costs of building a proprietary transmission line from Tiwai Point to Manapouri – when in fact such a project could not be undertaken, because it almost certainly would not obtain the required resource consent. This appears to be another example of re-engineering the TPM to deliver a price reduction to the Tiwai smelter at the expense of other grid-connected customers.
7. It is not clear why the Authority should be concerned about the possibility of NZAS exiting the market. Its statutory objective is to promote the long-term benefit of all consumers, not to favour any individual customer. We note that even if the smelter were to close, any subsequent increase in transmission charges to other grid users would be dwarfed by the benefits to consumers of a sharp fall in electricity wholesale prices. A Treasury report in 2012 cited modelling by MBIE indicating that an exit by NZAS would lead to a fall in wholesale prices of roughly 10%, and a total of \$2 billion in avoided generation costs in net present value (NPV) terms – offset by only \$200m in additional transmission costs.<sup>3</sup>
8. The smelter already benefits from paying the lowest wholesale prices in the country, and NZAS has received tens of millions of dollars in government subsidies in the past – all funded ultimately by New Zealand electricity consumers and taxpayers. Providing further assistance via an adjustment to the prudent discount arrangements would be in direct opposition to the Authority's statutory objective.

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<sup>3</sup> <https://treasury.govt.nz/sites/default/files/2013-09/nzas-2394495.pdf>

9. Even if one assumes, for the sake of argument, that it was appropriate for Transpower or the Authority to offer discounts to customers that might otherwise exit (which it clearly is not), the proposed amendment would *still* be inappropriate. A discount based on a purely hypothetical measure of standalone costs is of no relevance at all to exit decisions. By definition, any discount calculated using this methodology will be either too high (i.e., more than is needed to prevent a company from exiting) or too low (i.e., not enough). And as the Authority rightly acknowledged following submissions on its 2016 Issues Paper, it does not have the requisite expertise to calculate the correct discount in such a case.
10. The results of the proposal would also be arbitrary and inequitable. Suppose for the sake of argument that the reform is implemented, and the smelter receives a prudent discount. That will increase prices for:
  - smaller customers – many of whom are struggling with energy poverty, and
  - other large customers – some of whom may be facing similar challenges to the smelter. For example, many export businesses are currently under extreme financial duress on account of the coronavirus outbreak.
11. Many large customers (e.g., NZ Steel, Refining New Zealand, Norske Skog) are arguably just as significant to their local economies as the smelter is to Southland. Yet, it is unclear whether they would be able to avail themselves of the proposed prudent discount amendment. Perversely then, these customers would see their prices go *up* as a result of the very reform that is intended to *prevent* inefficient exit. That would make it *more likely* that these customers would exit if their respective export markets remain depressed.
12. Finally, although we are strongly opposed to the prudent discount amendment, Vector has already begun investigating its own bypass options in case the proposal is implemented. Our view is there will be options that would meet the test of falling below standalone cost and hence would be eligible for a prudent discount under the revised criteria.

### **Recovery profile for future benefit-based investments**

13. Vector does not support setting benefit-based charges based on depreciated historical cost (DHC) rather than the indexed historical cost (IHC) approach proposed in the Issues Paper.
14. We acknowledge that applying a DHC approach with straight-line depreciation to an entire regulatory asset base (RAB) is a widely-used approach when determining an annual revenue requirement (including under Transpower's individual price-quality path. However, if the approach is used to set prices for individual assets/investments, it will create serious inefficiencies. In particular, the front-loaded nature of the DHC methodology means that charges would be at their highest just after an investment has been made, when there is typically plenty of spare capacity available. Conversely, charges would be at their lowest immediately before a new investment needs to be made, when capacity is typically scarce.

Consequently, a DHC approach would serve to incentivise/disincentivise use of the grid at precisely the wrong times. The proposal is inconsistent with basic principles of efficient pricing.

15. We note that a key reason given in favour of DHC is that by front loading cost recovery, it may reduce the likelihood of disputes over benefit-based charging allocations in future. However, the obvious flip side is that it will increase the likelihood of disputes over benefit-based charging allocations when the assets are first built – which, as noted above, will generally be at times/places when the grid is facing constraints and new capacity is most needed.
16. The consultation acknowledges this at paragraph 3.19, noting that “DHC could inefficiently discourage replacement investment (as an investment would result in a significant increase in annual charges in the first year)”. However it then goes on to contend that “this is unlikely, because customers will typically receive substantial private benefits from an investment”.
17. We are sceptical of this reasoning. Common sense suggests that customers paying very little (if anything) to use an asset are unlikely to support a new investment for which they will then have to pay potentially steep prices, given the saw-toothed profile of DHC charges – even if they do benefit from the investment. Moreover, from a customer’s perspective, there may be no discernible difference in the quality of service provided by an ‘old’ asset and a ‘new’ asset. This would risk Transpower ‘sweating’ old assets which, in time, may threaten ongoing reliability and security. Finally, regardless of the private benefits they receive, customers will still have every incentive to dispute the *allocation* of charges among beneficiaries.

#### **Adjustments to benefit-based and residual charges**

18. The two remaining amendments in the supplementary consultation both introduce processes for adjusting future transmission charges. The first proposes that if a customer closes one of its plants, its liability for the associated benefit-based charges would cease ten years after the commissioning date of the associated grid investment (instead of continuing indefinitely). The second proposes that the initial allocation of the residual charge be based on anytime maximum demand (AMD), with subsequent annual adjustments based on changes in the four-year rolling average of gross annual energy usage (MWh), lagged by seven years.
19. We can see the merits in having a transparent methodology for adjusting future transmission charges. However, the arguments for calculating adjustments to the residual based on a volumetric measure rather than peak demand are not convincing. The chief rationale for using MWh as the basis for future reallocations seems to be that businesses would have a stronger incentive to change their behaviour to reduce their future share of charges if AMD is used. It is not clear that this would be a bad outcome, given that reducing AMD can serve to reduce future investment requirements. Consequently, we do not understand the logic of using AMD to set the initial residual charge allocations (which is clearly the Authority’s preferred metric) and MWh for subsequent resets. In our view, AMD should be used at all times.

20. From a more general perspective, the two amendments highlight the intrinsic lack of durability within the proposed TPM regime, which many submitters have commented on previously. Fundamentally, it is very difficult (arguably impossible) to forecast with precision who will be the beneficiaries of a transmission asset over its long lifetime. This creates an unavoidable trade-off in setting transmission charges under the proposed methodology because:
- If charges are recalibrated regularly to reflect the current profile of benefits, then this could cause customers to inefficiently alter their investment and consumption behaviour to reduce or avoid transmission charges, but
  - If charges are locked-in and rarely adjusted, then actual benefits are likely to diverge from forecast benefits – and become increasingly misaligned over time. This would create ongoing disputes as parties inevitably challenged the initial allocations and lobbied for them to be changed.
21. The proposed amendments both represent attempts to balance these competing considerations. However, they are unlikely to solve the underlying problem and could even exacerbate it. On the one hand, distortions to consumption and investment decisions might still occur, despite the changes. On the other hand, it seems unlikely that a customer would be satisfied with a long lag period in adjusting transmission charges if there is a significant change in grid use patterns, such that it ends up ‘using’ the grid much less than was forecast at the time the charges were set. Again, this creates the conditions for ongoing disputes and industry lobbying, and casts further doubt on the durability of the proposed arrangements.
22. The Authority has consistently maintained that its proposal would be more durable and less controversial than the status quo. Given the constant changes and revisions that continue to be made with each iteration of the TPM proposal, and the continued widespread opposition across the industry, we think this view is highly questionable. While we accept that there is a good case for reforming aspects of the current transmission charging arrangements, on its current trajectory there is a high risk that the TPM reform process will create many more problems than it solves.

Yours sincerely

For and on behalf of Vector Limited



**Richard Sharp**

Head of Regulatory and Pricing Compliance