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Dr John Rampton
General Manager Market Design
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Dear John

Re: TPM Problem Definition Working Paper 16 September 2014.

Thank you for the opportunity to submit on this paper. There has been lack of clarity as to what the real issue is with the current methodology for existing transmission assets, and on-going concern at unintended consequences that may occur if proposals put forward in 2012 2013 were to be implemented. The Authority is to be commended for stepping back and re-looking at the broader issue and attempting to more clearly define the problem.

In addition to the following comments we draw attention to the submission from Major Electricity Users Group (MEUG) and the NZIER report.

While the working paper again sets out to explain at the macro level quantified deficiencies with current arrangements, we must conclude there are many unaddressed factors and no compelling argument for change because we do not agree with the EA's analysis that there are material deficiencies with the TPM for existing transmission assets::

1. The 2012 2013 work placed great store on the beneficiaries-pays approach. The September 2014 paper has moved to a "cost" allocation approach¹ without, as far as we are aware, any attempt to reconcile the two different models or how the change has affected describing the problem definition.
2. In the early parts of the paper there are numerous statements to the effect that some customers are paying more and others less than what they should be.² It needs to be clarified whether these statements relate to customer location and benefits from recent grid upgrade projects, or whether this relates to some other criteria that would ascribe a group of customers to an over or under category.

¹ Eg Pg 34 "The authority considers that charges that seek to reflect costs are likely to best promote efficient outcomes." And pg 38 "...these problems arise...charges do not adequately reflect the cost of supplying transmission services to them."

² Eg 8.4 pg 38 "...some customers pay considerably more than the cost of transmission services to them while others pay considerably less", accompanied by Figure 2, an unhelpful graph

3. The extent to which the grid is utilised by the various participants and the degree of 'benefit' or share of 'cost' is not identified in the problem definition. The SPD suggestion in 2012 was an attempt to determine benefit (with issues in that regard being canvassed through the last round of consultations). With the current paper there is no recognition of the problem of differentiating between: generation remote from the consumers, third-party generation adjacent to consumer load, and (co)generation within a customer's operation.
4. There is a failure to recognise the guaranteed cost recovery aspect and how this influences the methodology (although it is mentioned³). We accept the Authority is hampered in the sense of a revenue figure for Transpower being effectively set by the Commerce Commission, and the base of the TPM work is how best to allocate this amount to users of the grid. However, the problem definition fails to recognise the impact and equity issues that arise from what is a cost allocation exercise. The fact there is no adjustment for over investment and the costs of any stranded assets (the exit of the Aluminium Smelter would be a prime example) are merely reallocated, is a significant impediment to the Authority meeting its statutory objective.
5. The paper rightly links back to the statutory brief for the Authority and the focus on the "...long-term benefit of consumers." What gets passing and indirect reference is the fact that only a handful of electricity consumers are customers of Transpower and less than 1% of consumers will have pass-through pricing. How the network distribution companies price transmission costs to the retailers, and how the retailers package this to the end consumer, is a very important part of reflecting "cost" and/or "benefit" to consumers, but yet the Authority have this as a separate EDB review work-stream for the future.
6. The paper fails to adequately consider the importance of co-generation and distributed generation (including solar PV) and how these fit into the problem definition.

Appendix D Submitter Questions

Question 1: Do you agree that, in relation to decisions around transmission pricing, the Authority should focus on overall efficiency of the electricity industry for the long-term benefit of electricity consumers? Why or why not?

In principle yes. It is important that pricing signals encourage long term utilisation of the grid with long term criteria in mind. As pointed out in the opening comments, the problem definition falls short.

Question 2: Do you agree with the Authority's view on what constitutes an efficient charge? What role do you consider durability plays in determining efficient charges? Please explain your answers.

Question 3: Do you agree with the Authority's revised position on the problem definition, described above? Please explain your answer.

The position as in 7.6 (a) (b) and (c) identifies what is required, but as outlined above the paper fails to produce a comprehensive problem definition.

Question 4: To supplement information already provided by Transpower, do you have any comments on the steps taken by Transpower or by other parties after approval of the NAaN, NIGU, and other investments such as the LSI Reliability Upgrade investments, to review whether it might have been

³ Pg 44, footnote 68.

efficient to postpone elements of them?

Question 5: To what extent do current interconnection charges promote efficient timing of investments? Please explain your response.

Question 6: To what extent do you consider participant support for transmission investments takes into account the cost implications for them and for other parties? To what extent do you consider the efforts made by participants to provide relevant information on transmission investments take into account the cost implications for them and for other parties?

NZ Steel through MEUG looks at projects proposed from the perspective of cost benefit.

The classification in Appendix C of “Prominent participants that did not submit” conveys an inference of criticism and/or tacit agreement with any proposal. This should not be assumed for the following reasons:

1. Consumers, irrespective of size, are not able to resource internally to adequately address and respond to all the many working papers and call for submissions on energy related matters.
2. NZ Steel is an active member of MEUG and relies on MEUG submissions to represent views in most situations. MEUG only makes submissions where there are matters of precedent at stake and it can make a difference. Where past decisions have clearly shown problems are with the investment decision making process then NZ Steel and MEUG efforts are channelled to effect changes to the regulatory regime administered by the Commerce Commission. Opportunities to make such changes occur infrequently given the long lived nature of Input Methodologies that govern investment approval decision making.

The Authority should be mindful that the volume of material and technical complexity disqualify most electricity consumers, large and small, from participating in the submission process. This should not be confused with apathy or acquiescence.

Question 7: Do you agree that the Kawerau investment proposal described is an example of an inefficient investment resulting from the TPM? Please explain your answer.

Question 8: Do you consider that current TPM can incentivise parties to prefer interconnection assets over connection assets or building and owning their own assets (by which they will be required to pay a higher portion of transmission costs)? Please explain your answer and provide any examples you may have.

In general terms it is hard to envisage a situation where attributing assets to a single consumer will give a better cost outcome for that consumer than spreading the cost of assets over many consumers. The approach a consumer may take can reflect many factors and to ascribe observed behaviour of a party acting in their best interest as being solely due to a failing of the TPM is too sweeping.

Question 9: Do you agree that the TPM can materially impact investment efficiency? Please explain

why or why not.

Yes. For those consumers with visibility of TPM charges there is currently a strong incentive (particularly UNI and USI) to manage peak load and assisting with investment efficiency. This is important to achieve long term efficiency through a cost allocation model.

Question 10: Do you agree that cross-subsidisation of TPM costs between consumers is an important consideration when considering the durability of TPM charges?

As per our opening comments, the wider issue to be addressed is expecting consumers to incur charges that include a return for over-investment and/or stranded assets, and failure to connect the dots between a beneficiary-pays approach with the current papers focus on cost allocation.

Question 11: Do you consider that the current TPM is durable? Why or why not?

There can be no perfect TPM solution that will not face some questioning and challenges. The current TPM 'durability' needs to be assessed against proposed alternatives. The push for change comes largely from the Authority, not those at the end of the current charge methodology.

Question 12: Do you agree that the examples provided above are examples of a durability problem? Please explain your response.

The issue for users of the grid are more related to the magnitude of the charges following large investment by Transpower, rather than 'durability' of the allocation methodology.

Future disconnection from the grid is a much broader subject than the commentary in Section 10 with transmission charges and allocation methodology only being part of the equation. Disconnecting from the grid can only be contemplated when a consumer has an assured source of internal generation to meet their constant needs (and/or sufficient storage eg small solar PV system). For larger users with onsite (co)generation, connection to the grid provides security of supply for both the customer and assists with stability for the grid.

Question 13: If you consider there to be a durability problem, do you know of any further examples of durability problems with the TPM? If so, please describe. Please also estimate the costs that you have incurred in relation to submissions on the TPM for as far in the past as you are able to provide (ie in relation to current and previous TPMs).

Records are not kept on time and cost allocated to regulatory matters. However, over the past two years we estimate direct costs of \$15,000 for involvement for the TPM review process.

Question 14:

Do you agree that durability is a particularly difficult problem to measure? Please explain why or why not. Are you aware of an appropriate methodology for measuring durability? If so, please provide details of that methodology.

Basically yes. While 10.2 outlines the attributes of a 'durable' charge, the paper does not really define the problem: the RCPD charge is objective and measurable, changing patterns of grid use cannot be adequately dealt with until the matter of stranded investment is addressed, and perverse outcomes can also result from cost recovery of over investment.

Question 15: Do you consider that the RCPD allocation provides an efficient signal of the need for load shedding at coincident peak times? Do you agree with the Authority's estimate of the possible efficiency effects?

RCPD for the UNI does provide a strong signal for load shedding at coincident peak times for load connected direct to Transpower or those customers who get pass-through of charges. NZ Steel does monitor and manage load during UNI peak periods at its main production site.

Further work should be undertaken on the effects of network tariffs and the strength of RCPD signals to end customers. Distribution companies pass Transpower charges to customers through inclusion in network prices. This is likely rebundled by retailers that give no direct signal to end consumers.

Assessment of inefficiency covered in the paper fails to recognise the cost (if any) of responding to RCPD signals is largely dependent on the extent of load reduction, how frequent, and duration. For NZ Steel short duration reduction in load can usually be achieved with little or no cost. Likewise infrequent, but longer duration, has minimal overall impact on cost. A blanket \$/MWh value of lost-load does not capture this, and in fact is misleading.

Question 16: Do you agree that the interconnection charge may over-signal the need for overall reductions in consumption? Do you agree with the Authority's estimates of inefficiency? Which of the four scenarios, if any, do you consider the most plausible? Please explain your answer.

The real question is, what an over-signal would look like? The paper rightly points out that it is known some large consumers do respond to the RCPD signals. But, it also points out that the TPM price signal for most consumers is embedded in a retail variable charge. To suggest this may result in an elasticity scenario and reduce overall consumption is not so much a TPM issue, but a rebundling issue by the distributors and retailers.

The Authority estimates and scenarios seem to be based on a number of unsupported assumptions and generalisations.

Question 17: Do you agree that the interconnection charge may over-signal the cost of increasing Tiwai smelter production in summer? Do you agree with the Authority's inefficiency assessments? Please explain why or why not.

Question 18: Do you agree that the interconnection charge and ACOT payments may over-signal the value of embedded generation? Please explain your answer.

Question 19: Do you agree with the Authority's assessment that, although the interconnection charge may over-signal the value of generation to direct-connect consumers, any resulting efficiency loss is likely to be relatively small? Please explain your answer.

The discussion on embedded generation and cogeneration needs full consideration. The results of the ACOT analysis is yet to be published, and this is important with the increasing uptake of solar PV. For large generation and cogeneration sites there are a number of factors to be considered with TPM only being one part of the technical and financial equation for cogeneration. In the NZ Steel situation this is based around utilisation of iron-making off-gases as the fuel for electricity generation. The paper fails to define the issue of varying degrees of benefit for generation in being connected to the grid (see above opening comment 3).

NZ Steel has previously submitted on the logic of net load at a supply point and questioned the right of Transpower as asset owner to enquire beyond a connection point.

The paper does not advance the problem definition in these areas.

Question 20: Do you agree that the HAMI allocation may incentivise SI generators to withhold existing capacity? Do you agree with the Authority's estimate of inefficiency? Please explain your answer.

Question 21: Do you agree that the HAMI allocation may discourage upgrades to SI generation capacity? Do you think this is a material problem? Please explain your answer.

Question 22: Do you agree that the HVDC charge may discourage investment in SI grid-connected generation? Do you agree with the Authority's inefficiency estimate? Please explain your answer.

Question 23: Do you agree that the HVDC charge may bring forward the need for upper SI transmission investment? Do you agree with the Authority's estimate of inefficiency? Please explain your answer.

Question 24: Do you agree with the Authority's view on prudent discount policy? Do you agree with Transpower's view that a PDP for notional generation is not practically achievable because of the difficulties in valuing notional disconnection? Please explain your answer.

A PDP or equivalent is required if the TPM does not adequately avoid unintended/unwanted consequences. PDP is not a problem, it is the result of an imperfect pricing methodology. We agree with the Authority to the extent that the issue needs further detailed consideration.

Question 25: Do you consider that there are any other material problems with the TPM (in particular, the HVDC charge, interconnection charge, and the prudent discount policy) that the Authority has not considered in this paper? If so, please provide details.

Please let me know if we can assist with clarification of any of the points made.

Regards

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