



**SUBMISSION TO THE ELECTRICITY
AUTHORITY
ON
TRANSMISSION PRICING METHODOLOGY
2019 ISSUES PAPER: Supplementary
Consultation Paper, 11 February 2020**

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Waitaki Power Trust's response to proposed Refinements to the New Approach to Transmission Pricing set out in the Electricity Authority's 2019 Issues Paper.

Summary

The Electricity Authority's mandate is set out in the Electricity Industry Act 2010, Part 2 S15 as follows:

"1.5 Objective of Authority

The objective of the Authority is to promote competition in, reliable supply by, and the efficient operation of, the electricity industry **for the long term benefit of consumers**" (Supplementary Consultation Paper, page 20, emphasis added).

The statutory mandate of trustee/shareholders of 100% Consumer Trusts is **similarly consumer benefit focussed** – always to act in the best interests of consumers, never self-interest.

Our conclusion, resulting from the completion of this submission, is that there is no need for the Authority to make the tentative statement that the 2020 proposed amendments to the proposed TPM guidelines set out in the 2019 Transmission Pricing Methodology

"may better promote the Authority's statutory objective" (2020 Supplementary Consultation Paper, page 20, our emphasis).

Waitaki trustees are confident that if the MWh measurement for customer demand is adopted then **consumers can be assured that the demand/usage component of Transpower's residual charge they are required to pay will be for the long term benefit of consumers.** We do however have a major concern with respect to the process for implementing the variable customer demand charge, (See paragraphs 35-37).

We summarise here also, our answers to questions three to six as follows:

Question 3

If a load customer previously paid a benefit based charge for the level of transmission services it received and that customer no longer requires the same level of service, then

- the customer should continue to pay its pro-rata share of outstanding debt associated with the transmission project for a set term;
- that the term be ten years; and
- that if the cost of the transmission project is not fully paid within that period, then the customers remaining share of the debt is to be recouped **only from other load** customers who also benefitted from the same project.

Question 4

Yes, the TPM guidelines should stipulate regular updates for the residual charge allocation.

Question 5

Waitaki trustees have reservations relating to the appropriateness of the process proposed for updating the residual charge allocation (see paragraph 40 (a) and (b)).

Question 6

Waitaki trustees give qualified support to whether an additional provision is to be added to the Prudent Discount Policy (see paragraphs 47-51).

Two recommendations have also been included.

RECOMENDATION 1

That the Electricity Authority commissions a series of cost benefit analyses to determine the financial impacts of

(a) a time lag assessed over varying specific time lines; and

(b) the number of years customer demand figures are to be averaged over,

the purpose being to ensure that the terms and conditions relating to guidelines for annual updating of consumer demand figures is carried out in a manner that by the MWh method is for the long term benefit of consumers.

RECOMENDATION 2

That the TPM guidelines also include provisions that will allow residual charges to EDBs to be amended by Transpower under publically stated **short term conditions** and that all such arrangements are publically notified, in the event that customer demand is to be measured by the AMD process.

A. Introduction

1. Waitaki Power Trust's submission on the 2019 Transmission Pricing Methodology Issues Paper (2019 TPM) looked at the extent to which high level policies relating to durability, fairness and human behaviour helped shape and determine the content of the Authority's 2019 new approach to transmission pricing.
2. The Authority acknowledges that the outcome of this latest round of consultation will be resolved

"Once we have considered submissions ... and settled on **policy positions on these issues** (and on any other outstanding issues)" (ibid, 7.2 page 19).

3. Additionally, Waitaki Power Trust's 2019 TPM submission focussed on the extent to which two key components of the 2019 TPM proposal could not be considered as being **for the long term benefit of consumers**.
4. We include here
 - The gross AMD fixed capacity charge; and
 - The requirement that Network Waitaki, as primarily a direct connect, non core grid Transpower load customer, will be required to contribute to a fund to mitigate an assumed price shock four large industrials would receive following the introduction of the new TPM charging guidelines.
5. Accordingly, Waitaki Power Trust's comments on the issues raised in the Authority's 2020 TPM Supplementary Consultation Paper will be structured in sections as follows:
 - B. Indicative Impact on Customers Benefit Based Transmission Charge when a Plant Closes.
 - C. Proposed Regular Updates on the Residual Charge Allocation.
 - D. Prudent Discount for Customer Transmission Charges when these are Above Standalone Costs.
 - E. Fairness and Durability versus Commercial Considerations
 - F. **Are** the Proposed Amendments to the 2019 TPM Guidelines for the Long Term Benefit of Consumers.

Waitaki Power Trust's Comments.

- B. **Indicative Impact on Customers Benefit Based Transmission Charge when a Plant Closes.**
6. Following discussion of whether benefit based transmission costs are to be charged on the basis of indexed or depreciated historical cost, the Authority considered the indicative impact on transmission charges, when benefit based charges are based on the depreciated historical cost of a transmission upgrade.
7. The conclusion by the Authority is that a benefit based charge calculated on the basis of depreciated rather than indexed historical costs

“is not expected to have a major impact on charges for transmission customers”
(ibid, 4.20, page 10).
8. Although it is acknowledged that a transmission customer which reduces load at some point following a transmission upgrade the customer has benefitted from, is required to pay its full share of the transmission upgrade for another 10 years following its reduced transmission load requirement, the Authority considers there are at least three reasons why the conclusion above is justified.
9. Trustees consider the caveat attached to the third reason to be totally unacceptable.
10. In the Electricity Authority's words

(c) after the expiry of the ten year period the customer's charges would be spread across other transmission customers who benefitted from the same investment (and **possibly across all customers through the reassignment of provisions**)". (ibid, 4.20 (c), page 11, emphasis added).

11. The Authority's proposal that a reduced demand transmission customer's pro-rata share of a debt, derived from the cost of a transmission upgrade that the reduced demand customer previously was identified as benefitting from but, under changed circumstances, no longer did so, could subsequently be recouped by **spreading the debt across all transmission customers, including those who did not even remotely benefit in any way at all from the upgrade**, belies rational thought.
12. The change from a genuine benefit based charge to some other debt category by applying the so-called **reassignment of provisions** process not only entails that a clearly specified type of debt can be morphed into another debt category but also, that the application of such a process with respect to benefit based charges, is inconsistent with an oral response to a question posed on behalf of Waitaki trustees to the Authority's Board members early in December last year.
13. The question Waitaki posed was along the lines of why debt recovery associated with four major transmission projects was included as a component of the proposed residual charge rather than being classified as a benefit based charge.
14. Board Chairman, Dr Brent Leighton's response was simple, open and straight forward – the Board could not see any benefit from the four historical transmission projects.
15. The implication from that statement is, as far as the Board is concerned, benefit based charges accrue only where transmission projects benefit customers and thus are to be paid only by transmission customers who benefit from a transmission project.
16. Waitaki trustees consider that the allow otherwise, that in other words, one type of charge can be morphed into a different type of charge, would create a precedent which **unavoidably would collapse into complete uncertainty for both generation and transmission load customers as to what type of charge they had been billed, for what.**
17. Accordingly, with respect to Question 3, Waitaki trustees support the proposed amendment that where there is significant change in the level of service a transmission customer requires, then that customer's liability to pay an identifiable and measurable benefit based charge relating to one or more transmission upgrades, need not apply until such time as full debt recovery occurs.
18. Given that under the depreciated historical cost method of calculating a customer's benefit based charge liability which trustees also support

"results in a front-loaded recovery profile" (ibid, 3.6, page 5),

Waitaki trustees further consider that the relevant customer's liability to pay its share of any benefit based charges should

- Continue for the period of ten years following the change in its circumstances; and
- That the commencement of the ten year period be calculated from the date of commissioning the transmission project from which the customer concerned previously had benefitted.

C. Proposed Regular Updates on the Residual Charge Allocation

19. Waitaki trustees contend describing the 2020 **proposed amendments** to be 2019 TPM guidelines associated with the recovery of a major portion of Transpower's revenue as **refinements**, is a gross under-statement **from a consumer perspective**.
20. The 2019 guideline for charging a transmission customer for services that meet the customer's anytime maximum demand (AMD) requirement is to be assessed as a function of its grid exit point (GXP) capacity which results in a charge that is fixed and unchangeable, until such time as Transpower may decide to undertake an operational review of the TPM guidelines.
21. Analysis of the consequences of changing the way customer demand is measured in MWh reveals a comparative chalk and cheese situation.
22. **From a consumer perspective** the annual energy consumption method of measuring customer demand has numerous benefits over the AMD system of measurement.
23. First and foremost of these is that in the case of **electricity distribution business (EDB) consumers**, no EDB and consequently its consumers will be required to pay a fixed annual charge for a service they nominally only benefit from in the short term, annually.
24. Regardless of whether an EDB is a summer or winter peaking network there is significant periods of time when consumer maximum energy demand is not required to be available.
25. Under circumstances, where a residual charge is fixed on an annual basis, **consumers ultimately are being required to pay for something they do not continually and invariably benefit from**, namely, the spare capacity of the GXP(s) which distribute electricity to their homes and/or businesses.
26. Further consumer benefits of the MWh system of measurement are:
 - energy consumption is a relatively accurate measure of customer demand;
 - there is some surety that an EDB and ultimately **its consumers** pay only for what they get, spelled out in this case, in terms of consumer electricity usage;
 - the accuracy of the charging regime is not upset by the flexibility required to accommodate the variability of customer demand;
 - a residual charging regime which can accurately accommodate changes in consumer energy use cannot be anything other than durable, because going forward, in the real world where consumers use electricity, there are few or no situations or processes that are fixed or rigid. Rather, energy demand and use will continue to vary as it has done in the past.
27. On that basis Waitaki trustees resoundingly support the adoption of the revised method of assessing customer demand.

28. In doing so however, we acknowledge that a variable residual charging regime is not in Transpower's best long term interests – that with respect to ensuring that revenue will cover expenditure a degree of certainty is necessary which will remain a problem for the Authority to address.
29. We further acknowledge that the position Waitaki trustees has adopted primarily is from the perspective of **transmission charges to consumers**.
30. The importance of adopting a consumer perspective is not to be under-stated as ultimately it will **determine whether the new TPM guidelines are durable**.
31. With respect to the implementation of the transition to energy consumption as the measure of customer demand, Waitaki trustees do however have a number of queries along with a recommendation.
32. Paragraphs 5.6 to 5.8 inclusive on page 12 of the 2020 Supplementary Consultation Paper outline the manner in which a customer's residual charge is to be determined and updated going forward.
33. To summarise our understanding of the process
- Rather than starting by replacing gross AMD based fixed charge customer demand data averaged over a four year period from 2014 to 2018, it is proposed that the data already available is to form the starting point from which to transition customer demand assessments as measured by the new MWh charging guideline.
 - The initial customer demand measurements will remain in place, fixed and unchanged for a period of seven years, from 2018 until 2025.
 - At the start of Transpower's 2025/26 financial year annual customer demand measurement expressed in MWh and averaged over the four year period 1 July 2015 to 30 June 2019 is to replace customer demand figures arrived at by following the gross AMD method of assessment.
 - The final step is that going forward from the 2025/26 pricing year customer gross MWh demand measurements averaged over a four year period from 30 June 2019 and taken as proxy for annual average usage for the four year period, will provide on an annual basis, a rolling average adjustment to consumer demand figures.
34. According to the Authority, the proposed process outlined above has been put together in an attempt to resolve a number of issues primarily relating to continued assessment of customer demand based on the originally favoured gross AMD method.
35. And, although the Authority agrees with submitters that
- “using gross AMD to update the residual allocation could be distortionary even with the lag” (ibid, 5.10, page 13),
- the contention is that
- “these issues do not arise if AMD is used (only) to set the initial allocation” (ibid, 5.11, page 13, word in brackets added).

36. Given the uncertainty created by the Authority's agreement with submitters cited above, plus the advantages to consumers we have identified, of measuring customer demand using the MWh guidelines rather than following the gross AMD approach, trustees seek an answer to the following question.
37. Why oh why, would the Authority continue to propose **a seven year lag period** during which time customer demand figures arrived at by following the gross AMD method **will be set in stone (see ibid 5.7, page 12)** prior to reassessment, using the MWh tool, in association with the introduction of annual consumer demand adjustments, as per the proposed method for regular updating?
38. In the absence of an answer to that question, Waitaki Power Trustees answers to questions 4 and 5 follow:
39. Question 4 – Should the guidelines stipulate for regular updates to the residual charge allocation?

Waitaki Power Trust's answer is an unequivocal 'Yes'.

40. Question 5 – If so, is the revised proposal an appropriate way to provide for such upgrades?

Waitaki Power Trust's answer is in two parts.

- (a) Trustees as consumer representatives also unequivocally support the measurement of customer demand using the MWh assessment process. It is the only way that variation in customer demand over time can accurately be measured.

Application of the gross AMD measurement tool results in a fixed charging system which from consumer perspective, would create tension and ultimately be rejected because as noted in the Authority's 2019 Transmission Pricing Consultation paper, "pricing arrangements are more durable when you pay for what you get" (2019 TPM Issues Paper, page iv).

Measuring a variable commodity in a fixed manner is analogous to trying to fit a square peg in a round hole.

- (b) As indicated above, trustees do have concerns with respect to the provisions for regular updating of customer demand.

In particular, we **reject both the use of the gross AMD customer demand measurement to establish base line system figures and the inclusion of a seven year lag period during which the guidelines will allow customer charges to be based on the initial fixed customer demand figures.**

Neither provision is for the long term benefit of consumers.

Further, if there are sound reasons why the MWh measurement system is better than the gross AMD method of measuring the customer demand category of residual charges, then the best system of measurement should be used from the outset.

As it stands of AMD measurements of customer demand are used as base line data then these must be updated using MWh figures prior to the 2025/26 year requiring an amendment to the guidelines, which to say the least is inefficient.

41. Further, prior to confirming the proposed guidelines for regular updates of consumer demand, a factor which is key to determining the level of a major charge to transmission customers, Waitaki trustees make the following recommendations:

Recommendation 1

That the Electricity Authority commissions a series of cost benefit analyses are commissioned to determine the financial impacts of

a. A time lag assessed over specific time lines; and

b. The number of years customer demand figures are to be averaged over,

The purpose being to ensure that the terms and conditions relating to guidelines for annual updating of consumer demand figures is carried out in a manner that is for the long term benefit of consumers.

D. Prudent Discount for Customer Transmission Charges when these are above Stand-alone Costs.

42. The assumptions on which two previous versions of a Prudent Discount Policy (PDP) have been more or less explicitly based include:
- (a) that disconnections from the national grid are more likely than not to result in inefficient outcomes; and
 - (b) That the 'more is less' principle applies, so that transmission customers can be better off if an applicant proposing to disconnect remains as a customer even if they are paying discounted transmission charges;
 - (c) that if a customer is better off then consumers also will benefit.
43. The 2019 version of a prudent discount policy addressed the issue of uneconomic disconnection by putting in place the following conditions which allows that the customer qualifies for a discounted residual transmission charge if they can show that
- “it would be **technically and operationally feasible and commercially beneficial for ... (that customer)** to bypass the grid and source an alternative supply of energy **where it is not efficient to do so**” (ibid, 6.4, page 10).
44. The Authority proposes to amend the 2019 PDP by including an updated provision from its 2016 TPM Second Issues Paper that

“would allow a customer to apply for a prudent discount that would reduce its transmission charges to the efficient stand-alone cost of supplying it with the transmission services it receives” (ibid, 6.5, page 16).

45. The 2020 revised addition allows

“a customer to apply for a prudent discount that would reduce its transmission charges to the efficient stand-alone cost of supplying it with the transmission services it receives” (ibid, 6.5, page 16).

46. As is acknowledged by the Authority, prior to the 2020 additional guideline being implemented, the PDP will require further amendment to include a method for determining the

“efficient stand-alone cost of supply” (ibid, 6.7, page 16).

47. Waitaki trustees concern is the extent to which potential tension could arise between the way in which the two limbs of the amended PDP may affect the practical application of each proposal individually.

48. On the one hand, if a customer applies for a prudent discount under the technically, operationally, commercially feasible, but inefficient condition, it is required that they show they have a viable business case for disconnection.

49. On the other hand, when applying for a prudent discount of transmission costs on the grounds that the current charges are above the efficient stand-alone costs it would pay for the transmission services the customer receives, the pre-requisite is that the efficient stand-alone cost of supply (or the efficient **greenfield** stand-alone cost of supply) is assessed.

50. Essentially, Waitaki trustees concern is the extent to which producing a viable business case could be coloured by the outcome of assessments relating to the efficient stand-alone cost of supply.

51. Waitaki trustees seek some form of assurance that PDP processes, put in place for the long term benefit of consumers, cannot be distorted by bias.

52. Trustees contend the common understanding of what constitutes a ‘business case’ differs significantly from assessing the stand-alone cost of supply based on ‘an efficient greenfield’ methodology.

53. Accordingly, Waitaki trustees give qualified support to Question 6, the proposal that a load customer should

“be eligible for a prudent discount if it can establish that its transmission charges exceed the efficient greenfield stand-alone cost of supply” (ibid, question 6, page 19).

E. Fairness and Durability versus Commercial Considerations

54. When discussing the measurement of customer demand the Authority makes explicit the previously unstated concept of **ability to pay**.

55. Submitters are informed, for example, that
- “the residual charge Is intended to be allocated among customers in the least distortionary way and is **allocated based on a proxy for ability to pay**” (ibid, 5.2, page 12).
56. Elsewhere, in discussion relating to regular updates of the residual charge allocation, the Authority identifies as an issue that
- “if the allocation is not updated regularly customer charges could become increasingly misaligned with customer size and the **ability to pay**” (ibid, 5.9 (b), page 13).
57. Indeed, it is evident that during early discussions relating to how customer demand was to be assessed, the Authority was particularly concerned about the effects the MWh method could have on some load customers, as it
- “was judged **likely to have a material adverse impact on some industrial load customers which could potentially lead to inefficient disconnection**” (ibid, 5.4, page 12).
58. Based on the above comment by the Authority, Waitaki trustees have grave concerns that ‘ability to pay’ can be used in a **discriminatory** way to benefit some load customers but not others.
59. In the case of direct connect industrials, public statements about the adverse impact of energy costs, including increases in transmission charges, appear regularly in the media.
60. And, Waitaki trustees are also aware that the major electricity users group (MEUG) advocates privately on issues relating to transmission and energy charges.
61. On the other hand, adverse financial impacts of transmission charge increases to EDB consumers are hidden under a **customer based approach** to TPM pricing guidelines and hence are unknown by the Authority simply because **consumers are the ultimate users of the energy transmitted, but only the EDB is regarded as a stakeholder** in the issues under discussion.
62. It does **not** follow from that approach, however, that **no businesses serviced by Network Waitaki (NWL) in particular**, will be adversely impacted by the significant increase in transmission charges the company faces if the TPM guidelines include the gross ADM charging regime – an increase from approximately \$3 million to \$4.6 million, annually.
63. Irrespective of the relative size of commercial activities which contribute to local and national wellbeing, it is **plainly unfair** to take into account large industrial business’s ability to pay, while overlooking the impact of significant increases to EDB business customers as well.
64. Further, given the effect of fairness or the lack of it, on the Authority’s objective that the new approach to transmission pricing be durable, Waitaki trustees make the following recommendation if the AMD measuring tool is adopted instead.

RECOMENDATION 2

That the TPM guidelines include provisions that will allow residual charges to EDBs to be amended by Transpower under publically stated **short term** conditions and that all such arrangements be **publically notified** in the event that customer demand is to be measured by using the AMD process.

65. While Waitaki trustees' recommendation is based generally on the need for fairness of the new TPM guidelines, we also do not consider
- that averaging annual customer MWh demand over **any set period of time**, is sufficiently sensitive to account for fickle climatic conditions;
 - that the significant variability of energy demand and use, irrigators are likely to face going forward should not be overlooked;
 - that EDB **customer size is NOT invariably a reliable indicator of ability to pay**, as is implied by the Authority (see *ibid*, 5.9 (b), page 13).
66. Elsewhere in the Supplementary Consultation Paper the Authority clearly states that **customer size is the key measure** for assessing a load customer's ability to pay.
67. For example, we are told
- "AMD is a proxy for the customer's size and ability to pay (*ibid*, 5.11, page 13)
- and, that
- "annual gross energy usage is an easy-to-observe indicator of relative size/ability to pay" (*ibid*, 5.15, page 14).
68. From the **consumer perspective** of Waitaki trustees, it is fallacious to link customer size and ability to pay.
69. In the real world it is EDB **consumers**, who use electricity and for many EDBs the quantity of energy usage is largely a reflection of small business activity within the EDB's distribution area.
70. Hence, without transmission charge concessions, only available to large industrialists, small businesses, such as those that rely on pressurised water, including irrigators, will find themselves in the situation where they will be damned cost wise, if they irrigate, and damned revenue wise, if they don't.
71. `That situation is in no-ones best interest.

F. Are the Proposed Amendments to the 2019 TPM Guidelines for the Long Term Benefit of Consumers?

72. The Authority's view is that the amendments proposed in the 2020 supplementary consultation paper

“may better promote the Authority’s statutory objective” (ibid, page i).

73. Waitaki trustees contend from a consumer perspective, that assessment is extremely conservative, and that the Authority needs to self-recognise the enormity of the resultant change from the AMD system of charging to basing charges on a MWh approach.
74. There is no way that using a measurement tool that can only produce rigidly fixed values can **accurately** measure variability associated with **actual consumer usage**.
75. Measuring a variable level of service with a fixed charge tool is pure economist speak.
76. Thus it is important to make explicit Waitaki trustees’ view that accurate capture of consumer demand is the essential prerequisite that the TPM guidelines are durable and hence for the long term benefit of the consumers.
77. However, trustees do concede that if the Authority is to prioritise the efficiency of transmission charges as cost efficient, over durability of the new TPM guidelines, then assessing customer demand in terms of AMD **peak load requirements** would turn out to be the preferred measurement option.
78. At bottom, the issue is that both durability of TPM guidelines and cost efficient charges can be considered as being for the long term benefit of consumers.
79. As consumer representatives, Waitaki trustees support the measurement of EDB customer/consumer demand from the stand point of consumers.
80. The final decision as to the type of customer/consumer assessment tool rests of course with the Authority.
81. Because the Authority has explicitly stated that

“the content of this consultation paper does not preclude further changes or stakeholder engagement such as on the cost benefit analysis or peak charging”
(ibid, page i),

Waitaki trustees request that if there is to be further stakeholder engagement, particularly relating to peak charging, that we have further opportunity, as consumer representatives,

to participate.

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