TP TPM APPENDIX B - SPECIFIC DRAFTING AMENDMENTS TO THE PROPOSED TPM GUIDELINES

<table>
<thead>
<tr>
<th>Explanation for proposed amendment</th>
<th>Track change version of the Guidelines</th>
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<td><strong>TPM gGuidelines for development of the</strong></td>
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<td></td>
<td><strong>Transmission Pricing Methodology</strong></td>
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<td>Published under clause 12.83(b) of the Electricity Industry</td>
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<td>Participation Code 2010 on [insert date]</td>
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**Introduction**

1. These guidelines for the development of the transmission pricing methodology *(TPM)* are published by the Electricity Authority *(Authority)* under clause 12.83(b) of the Electricity Industry Participation Code 2010 *(Code)*.

The added terms are used in the Guidelines and defined in the Capex IM. The deleted terms are not used in the Guidelines as modified.

**Interpretation**

2. In these guidelines, the following terms have the meaning given to them in the Transpower Capital Expenditure Input Methodology Determination [2012] NZCC 2, including each amendment to that determination, in force on the date of these guidelines ⎯:

(a) asset refurbishment:

(b) asset replacement:

(c) base capex:

(d) capital expenditure:

(e) commissioned:

(f) commissioning date:
Paragraph (d) incorporates the current TPM definitions, some of which are used in the Guidelines. The terms defined in paragraphs (a), (b) and (c) are not defined elsewhere, at least not appropriately for the Guidelines. Paragraph (e) is a standard interpretation clause.

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<td>major capex proposal:</td>
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<td>(h)</td>
<td>non-transmission solution:</td>
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<td>programme:</td>
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<td>(j)</td>
<td>project.</td>
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3. **In these guidelines, unless the context otherwise requires:**

(a) *charge* means a charge under the TPM:

(b) *load designated transmission customer* means a designated transmission customer that is a distributor or direct consumer:

(c) *Transpower* means Transpower New Zealand Limited in its capacity as a grid owner:

(d) —any other term that is defined in the TPM in force on the date of these guidelines or Part 1 of the Code and used but not defined in these guidelines has the same meaning as in—

(i) the TPM in force on the date of these guidelines; or

(ii) if not defined in the TPM, Part 1 of the Code;

(e) clause and paragraph references are to clauses and paragraphs of these guidelines.

The changes ensure full alignment with clauses 12.78 and **General**
12.89 of the Code, and the statutory objective. It should be recognised that the principal role of the TPM is to enable recovery of Transpower's full economic costs.

4. The purpose of the Transmission Pricing Methodology, consistent with clause 12.78 of the Code, is to ensure that, subject to Part 4 of the Commerce Act 1986, the full economic costs of Transpower's services are allocated in accordance with the Authority's statutory objective specified in section 15 of the Electricity Industry Act 2010, as required by clause 12.89(1)(b) of the Code, the TPM must be directed at—
   (a) facilitating efficient investment in the electricity industry by providing incentives for the right investments to occur at the right time and in the right place. Those investments may be in the transmission grid, generation (including distributed generation), distribution networks or the demand-side; and
   (b) facilitating the efficient operation of the transmission grid, generation (including distributed generation), distribution networks and demand-side management. This means providing incentives so that the day-to-day operation of transmission, generation, distribution, and demand-side management involves an efficient trade-off between reliability and cost.

Clause 6 is instead of proposed clauses 43(b) and (c).

We do not consider the changes to the connection charge methodology should be left to Transpower's discretion as "additional components". They are relatively uncontroversial and do not substantially change the connection charge regime in the current TPM.

The requirement for the allocation of operating and maintenance costs to eligible investments to be cost reflective is now in clause 9(a)(iii).

<table>
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<th>Connection charge</th>
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<td>5. Subject to clauses 43 to 467 of these guidelines, the TPM must—</td>
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<td>(a) include a definition of connection asset that corresponds to the definition of connection asset in the TPM in force on the date of these guidelines; and</td>
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<td>(b) charge for connection assets and related transmission alternatives on the same basis, and with the same effect, as under the TPM in force on the date of these guidelines.</td>
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We consider proposed clause 43(a) should be deleted because it is a statement of what the law already is following the Vector decision. Making or not making the change achieves the same result.

The TPM must include any or all of the following additional components if their inclusion is practicable and consistent with the requirements of clause 12.89 of the Code:

- a requirement that, if an asset that will ultimately not be classified as a connection asset is commissioned such that it meets the definition of connection asset, it must be charged for as a connection asset while it meets that definition;

- a method to ensure that the charges that apply to connection assets that provide connection services are not affected by a person (other than Transpower) connecting its assets to grid assets owned by Transpower;

- a method for allocating Transpower’s operating and maintenance costs to connection assets that is at least broadly cost-reflective in relation to which the area-of-benefit charge or connection charge applies to parties that pay charges in relation to that asset, on an actual-cost basis.

We have divided out the high level description of what the area-of-benefit charge does and expanded it slightly in clause 8. We have included in clause 9 a fuller description of the costs the area-of-benefit charge recovers and a net benefit cap (paragraph (b)).

In relation to the net benefit cap, we think it is consistent with the beneficiaries-pay principle in the Authority’s decision-making and economic framework for the area-of-benefit charge for an eligible investment to be no more than the aggregate net benefit of the investment to the customers who pay for it.

Area-of-benefit charge

- The TPM must include an area-of-benefit charge that recovers the full cost of each asset (excluding any connection asset) that is included in an eligible investment.

- An area-of-benefit charge is a charge paid by designated transmission customers assessed as likely to benefit from an eligible investment, with the charge allocated in proportion to the positive net benefits they are expected to receive from the investment, or a proxy for those positive net benefits.

- The area-of-benefit charge for an eligible investment must recover
the lesser of—
(a) the sum of, over the full expected life of the eligible investment—
   (i) Transpower’s full capital cost of the eligible investment; and
   (ii) Transpower’s full capital cost of holding the eligible investment; and
   (iii) an allocation of Transpower’s maintenance and operating costs to the eligible investment that is at least broadly cost-reflective; or
(b) the expected aggregate positive net benefit of the eligible investment to designated transmission customers over the expected remaining life of the eligible investment.

Under some benefit-measurement options it may be simpler to include more, or all, grid assets as eligible investments, hence “as a minimum”.

In clause 10(b)(i) we consider the relevant date should be the commencement of the TPM for alignment with proposed clause 13 (in which the commencement date is anticipated to be 1 April 2019).

We have made other changes to draw a clear distinction between projects and the grid assets that arise from them (the latter rather than the former being eligible investments).

107. An eligible investment, as a minimum, is any of the following—:
(a) any non-transmission solution that is not a transmission alternative relating to a connection asset;
(b) any grid asset, other than a connection asset, that is in at least one of the following categories—
   (ia) a grid asset arising from a project or programme of base capex or major capex, that is commissioned on or after the commencement of the TPM date of these guidelines; and
   (ib) a grid asset arising from any of the following projectsinvestments:
      (1) the North Island Grid Upgrade Project, approved
by the Electricity Commission on 5 July 2007; and

(2) the Upper South Island Dynamic Reactive Support Project, approved by the Electricity Commission on 25 July 2007; and

(3) the Otahuhu Substation Diversity Proposal, approved by the Electricity Commission on 30 August 2007; and

(4) the HVDC Project, approved by the Electricity Commission on 25 September 2008; and

(5) the Wairakei Ring Project, approved by the Electricity Commission on 20 February 2009; and

(6) the North Auckland and Northland Project, approved by the Electricity Commission on 30 April 2009; and

(7) the Upper North Island Dynamic Reactive Support Project, approved by the Electricity Commission on 5 July 2010; and

(8) the Lower South Island Renewables Project, approved by the Electricity Commission on 9 August 2010; and

(9) the Lower South Island Reliability Project, approved by the Electricity Commission on 6 September 2010; and

(10) the Bunnythorpe-Haywards Reconductoring Project, approved by the Commerce Commission on 9 May 2014; and
118. The TPM must include:

- (a) a standard method to apply for allocating the area-of-benefit charge for an each eligible investment valued at $520 million or more at the time the investment is commissioned or at its commissioning date or completion date, as the case may be, (high value investment); and

We have increased the threshold for the standard method to align with the $20 million threshold for major capex in the Capex IM.

We have separated the description of the standard method from the simplified method for clarity and to remove repetition.

We have moved proposed clause 8(b) to clause 16.

It is possible not all of the requirements of proposed clause 9 will be part of the simplified method.

We have removed proposed clause 9(c) because the step of allocating between load and generation customers (in the aggregate) is redundant. We have removed proposed clause 9(d) because the changes to clause 10 make it redundant also.

We have incorporated proposed clauses 10(a) and 10(b) because they relate to allocating in proportion to benefits (or a proxy for them).

We agree the fall back method for allocating the area-of-benefit charge to load customers should be consistent with the method for allocating the residual charge (proposed clause 12) but do not agree that method should necessarily be based on physical capacity.

129. The standard method Each of the methods described in clause 8 must, for a high value investment—

(a) for each eligible investment, identify the expected areas-of-benefit for the investment (in the case of the standard method) or the main areas-of-benefit (in the case of the simplified method). An area-of-benefit is an area in which at least one designated transmission customer is expected to receive a positive net benefit from the eligible investment; and

(b) allocate the area-of-benefit apportion charges for the investment across each the areas of-benefit in proportion to based on the aggregate expected positive net benefits from the investment to the designated transmission customers to which positive net benefits are expected to accrue in each that area-of-benefit; and

(c) allocate charges to generation designated transmission

(iiie) Pole 2 of the HVDC link; and

(d) to the extent not covered by paragraphs (a) to (c), the cost of any payments made by Transpower in respect of a non-transmission solution.
customers and load-designated transmission customers so that each group is allocated charges that correspond to the proportion of the aggregate positive net benefits that the group is expected to receive from the eligible investment; and

(d) apportion the area-of-benefit charge between eligible investments, if a project or programme provides for replacement or refurbishment of assets contained in 2 or more of those eligible investments.

10. The standard method must—

(a) to the extent practicable, provide for charges to be allocated to designated transmission customers in that area-of-benefit in proportion to their individual expected positive net benefits from the investment so that each customer is allocated the proportion of the charges that corresponds to the proportion of the aggregate positive net benefits that it is expected to receive from the eligible investment in that area-of-benefit; and

(b) to the extent that the method in paragraph (ba) or (c) is not practicable, provide for—

(i) charges to be allocated to each load designated transmission customer in the area-of-benefit on the basis of each customer’s physical capacity on the same basis as the residual charge; and

(ii) charges to be allocated to each generation designated transmission customer in the area-of-benefit on the basis of each customer’s average injection over the
We consider proposed clauses 10(d), 10(e) and 10(f) should be deleted.

In relation to proposed clause 10(d), investment proposals under the Capex IM are evaluated on the basis of overall market benefits, not individual benefits which are at the core of the area-of-benefit charge allocation. It is therefore unclear how the allocation of the area-of-benefit charge for an eligible investment can be consistent with the investment proposal for it, particularly in the case of historic investments.

The Guidelines make no distinction between base capex and major capex projects, so proposed clause 10(e) is redundant.

See section 3.4.2 of our submission for the justification for deleting proposed clause 10(f).

If clause 10(d) or 10(f) is included in the Guidelines then it should be as an “additional component” only.

This clause combines proposed clauses 10(g) and 13 (noting that the latter may not be applicable to the simplified method).

We have made a change to reflect that the new TPM may not commence on 1 April 2019.

Paragraph (c) is to ensure that distributors’ customers are included in the benefits analysis rather than just the distributors.

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<th>previous 5 pricing years; and</th>
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<td>(d) result in charges that are consistent with the identification of benefits (if any) in relation to the relevant investment proposal; and</td>
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<td>(e) be consistent in its application as between major capex and base capex; and</td>
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<td>(f) for each high value investment commissioned on or after the date of these guidelines, provide for Transpower to adjust a customer’s charges to reflect—</td>
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<td>(i) any marginal saving to Transpower from the customer’s credible commitment to reduce its demand for transmission services, if that commitment results in Transpower changing its investment plans resulting in a reduction in costs; or</td>
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<tr>
<td>(ii) any marginal increase in costs to Transpower from the customer’s credible commitment to increase its demand for transmission services, if that commitment results in Transpower changing its investment plan resulting in an increase in cost; and</td>
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13. The standard method must provide for—

(a) provide for Transpower to consult with interested parties about the areas that are likely to benefit from the high value investment, and the extent of any such allocation of expected net benefits across and within the areas of benefit; and

(b) for the purposes of clauses 9(a) to (e), 10(a), and 11(c) to
(d), the TPM must provide for expected net benefits to be assessed as follows:—

(i) for eligible high value investments commissioned before 1 April 2019, as at 1 April 2019 the commencement of the TPM, for the expected remaining life of the investment at the commencement of the TPM:

(ii) for any other eligible high value investments, as at the date of commissioning or the completion date (as the case may be), for the expected remaining life of the investment— at the investment’s commissioning date or completion date; and

(c) expected net benefits to distributors to include expected net benefits to their customers.

We have made the simplified method optional (“may” instead of “must”) because, depending on the standard method Transpower develops, there may be no need for a simplified method.

If there is a simplified method then it should be able to be applied to existing (sunk) high value investments due to the potential difficulties in carrying out a sophisticated benefits analysis on an historical basis.

We have generalised the requirement for the simplified method. We do not consider the more prescriptive requirements of proposed clause 11 are necessary (or helpful) for the simplified method.

14. The TPM may include (b) a simplified method to apply to for allocating the area-of-benefit charge for each eligible investment valued at less than $5 million at the time that the investment is commissioned or at the completion date, as the case may be, a high value investment (low value investment); and. The simplified method may also be used to allocate the area-of-benefit charge for a high value investment with a commissioning date or completion date before the commencement of the TPM (sunk investment) if it is not practicable to use the standard method to allocate the area-of-benefit charge for the sunk investment.

15. The simplified method may differ from the standard method in any way that makes it simpler to apply and administer than the standard method, provided that the simplified method allocates the area-of-benefit charge for a low value investment or sunk
investment in a manner that is broadly consistent with the
distribution of expected net benefits from the investment across
designated transmission customers.

11. The simplified method must—

(a) to the extent practicable, be simple to apply and administer; and

(b) to the extent practicable, be simple for a party paying the charge to ascertain why the party is subject to the area-of-benefit charge; and

(c) for each eligible investment, identify each designated transmission customer that is expected to receive a positive net benefit from the eligible investment, unless doing so would unduly prejudice the requirements of paragraphs (a) and (b), in which case the method must identify the designated transmission customers expected to receive the majority of the positive net benefits; and

(d) to the extent practicable, provide for the allocation of charges to the beneficiaries identified in paragraph (c), so that each beneficiary is allocated the proportion of the charges that corresponds to the share that the beneficiary is expected to receive of the aggregate positive net benefits expected to be received by all identified beneficiaries; and

(e) to the extent that the method in paragraph (c) is not practicable, provide for—

(i) charges to be allocated to each identified beneficiary that is a load designated transmission customer on a physical-capacity basis; and
(ii)—charges to be allocated to each identified beneficiary that is a generation designated transmission customer on the basis of each customer's average injection; and

(f) be phased in over a short a period of time as is practicable after the standard method takes effect.

This clause was proposed clause 10(c), which applied only to the standard method. We consider it should also apply to the simplified method (arguably more so than the standard method).

16. (c) To the extent practicable, the standard method and simplified method must limit the need for Transpower to exercise discretion;

and:

Proposed clause 12 is redundant given clause 13(d)(i) above and other changes.

12. The method for determining physical capacity for the purposes of clauses 10(b)(i) and 11(e)(i) must be the same as the method used to determine physical capacity for the purposes of clauses 24 to 29.

This clause combines proposed clauses 14, 15 and 16.

We consider all grid assets that are eligible investments should be valued on a replacement cost basis. If the potential use of DHC for either existing or new eligible investments is included in the Guidelines then it should be on a “for consideration by Transpower” basis only.

Our current assessment is that replacement cost is preferable to depreciated historical cost because:

- it minimises or avoids price discrimination on the basis of the age of eligible investments (and potential situations where some grid assets are a mix of assets valued at replacement cost and depreciated historical cost);
- it is consistent with the valuation approach to connection assets;

17.4. Except as provided for in clauses 15 and 16, The TPM must, for the purposes of determining the area-of-benefit charge, provide for—

(a) all grid assets in eligible investments commissioned before the date of these guidelines to be valued on a replacement depreciated historical cost (DHC) basis; and

(b) assets in eligible investments commissioned on or after the date of these guidelines to be based on a replacement cost (RC) basis.

15. In relation to any asset to be valued at replacement cost, the TPM must provide that—

(ba) Transpower must determine the expected life of each grid asset to be determined at the time of commissioning; and

(b) subject to paragraph (c) and clause 16, the area-of-benefit
it is consistent with the Authority’s service-based principle – service quality does not necessarily depend on the age of grid assets; and

the reduction in the area-of-benefit charge under depreciated historical cost as a sunk eligible investment ages and capacity utilisation increases would be in the opposite direction of the LRMC charge.

We do not share the Authority’s concern that “charging RC may lead to… the recovery of more than the RC (potentially up to double recovery) on some older assets” or its view that “the preservation of DHC for existing assets provides a gradual transition to RC over time”.

Preliminary estimates of replacement cost by Transpower indicate replacement cost is less than depreciated historical cost for most eligible investments, reflecting that (other than Pole 2 of the HVDC link) they were all approved by the Electricity Commission or Commerce Commission between July 2007 and May 2014. Adoption of replacement cost would ameliorate the price shock from the proposed change to the area-of-benefit charge.

See Appendix I of our submission for further discussion of replacement cost versus depreciated historical cost.

Proposed clause 15(b) is redundant given clause 9(a)(i) and (ii) above.

We consider modifications to an existing grid asset should be treated as part of the existing grid asset rather than as separate assets (clause 17(d) replacing proposed clause 16).
We consider Transpower should have discretion to reallocate the area-of-benefit charge for a low value investment that is significantly modified, using the standard method.

| 18. The TPM must provide that, if the existing grid asset referred to in clause 17(d) is a low value investment and the effect of the modification is to increase its value to $20 million or more, Transpower may (but is not obliged to) reallocate the area-of-benefit charge for the grid asset (as modified) using the standard method. |
We do not consider optimisation should be available. See section 3.4 of our submission. If optimisation is included in the Guidelines then it should be as an “additional component” only.

17. The TPM must provide that designated transmission customers may apply to Transpower—

(a) to have the value of an asset in an eligible investment commissioned before the date of these guidelines optimised from DHC to optimised depreciated historical cost (ODHC).

(b) have the value of an asset in a high-value investment commissioned on or after the date of these guidelines optimised from RC to optimised replacement cost (ORC).

18. The TPM must provide that, if Transpower receives an application to have an asset optimised as described in clause 17, Transpower must optimise the value of the asset in the following circumstances:

(a) for an asset in an eligible investment commissioned before the date of these guidelines, if the ODHC for the asset is less than 80% of the DHC for the asset;

(b) for an asset in a high-value investment commissioned on or after the date of these guidelines and before the investment has been commissioned for the period of time specified in the TPM, if—

(i) a single customer disconnects from the grid causing the ORC for the asset to reduce by more than 20%; and

(ii) the ORC for the asset is less than 80% of the RC for the asset;

(c) for an asset in a high-value investment commissioned on or after the date of these guidelines and after the investment has been commissioned for the period of time specified in the TPM, if the ORC for the asset is less than 80% of the RC for
19. The TPM must—

(a) include a method and process for Transpower to determine the ODHC or the ORC for an asset; and

(b) specify a period of time for the purposes of clauses 18(b) and (c), which must be sufficient to ensure that the prospect of optimisation has a negligible impact on customers’ motivation to seek new investment; and

(c) provide for Transpower to have the discretion to revise the ORC or ODHC for an asset, if demand for the asset changes by more than 20%.

20. Transpower would have the discretion to remove optimisation altogether if, following a revision under clause 19(c), the criteria for optimisation is no longer met.

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1924. The TPM must include a method and process for—

(a) Transpower to review the application of the area-of-benefit charge for a high value investment if there has been a material change in circumstances, and adjust the charge if
necessary; and
(b) Transpower to decide when a material change in circumstances has occurred, which must include consultation with interested parties about whether there has been a material change in circumstances before proceeding to review any area-of-benefit charge.

| Proposed clause 22 is redundant given clause 9(a)(iii) above. | 22. The TPM must provide for the area-of-benefit charge to include an allocation for maintenance and operating expenses that is at least broadly cost-reflective. |
| We consider it imperative the TPM retain some form of LRMC charge. The removal of the current RCPD charge, and replacement with fixed charges, risks increasing peak demand and (inefficiently) bringing forward grid investments. We do not agree with the Authority’s proposal to relegate the LRMC charge to the status of an “additional component”:  
- Inclusion as a mandatory component would provide greater certainty, particularly during the period between the Guidelines being finalised and a new TPM being approved by the Authority.
- The cost-benefit analysis in the Issues Paper shows that adoption of a simplified (four region) LRMC charge would produce a net benefit of $213m. A more sophisticated LRMC charge would likely result in even greater net benefits. |
| LRMC charge  
20. The TPM must include an ex ante long-run marginal cost, or long-run marginal cost-like, charge (LRMC charge).  
21. The LRMC charge must—  
(a) be designed to promote the efficient use of grid assets that are not connection assets, so as to efficiently defer or avoid grid investment; and  
(b) complement or augment, but not duplicate, the price signals provided by other charges and by nodal energy pricing.  
22. The LRMC charge may be—  
(a) used to signal the impact of location or peak-usage on grid investment requirements; and  
(b) allocated to load or generation designated transmission customers. |
| We consider the LRMC charge should be able to be attributed to the area-of-benefit charge, not just the residual charge. See  |
| 23. To the extent the LRMC charge defers or avoids investment in an existing eligible investment, or an investment that would provide |
We do not consider the Guidelines should prescribe the method for allocating the residual charge, even as broadly as being proportional to physical capacity. See section 3.2 of our submission.

We were unable to ascertain from the Issues Paper a basis for ruling out other fixed charge options which could also potentially minimise distortions caused by recovery of the residual.

We consider a generic, outcome-based description of the residual charge allocation methodology is most appropriate (clause 26).

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<td>services substantially similar to those provided by an existing eligible investment, the LRMC charge must be deducted from the area-of-benefit charge for the eligible investment.</td>
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### Residual charge

24. The TPM must include a residual charge.

25. The residual charge TPM must provide for the recovery of any part of Transpower’s revenue not otherwise recovered by other charges TPM (or any lesser amount determined by Transpower) through a capacity-based charge on load designated transmission customers (called the residual charge), allocated according to the proportion that the physical capacity of each load designated transmission customer’s connection to the grid bears to the total physical capacity of all load designated transmission customers’ connections to the grid.

26. The TPM must specify a method for allocating the residual charge that minimises or mitigates—

(a) potential distortion or inefficiency from recovery of the residual charge (that is, the allocation must be as fixed or unavoidable as practicable); and

(b) the extent to which undue price shocks arise from the adoption of the residual charge.

24.—For the purposes of clause 23, the TPM must specify whether physical capacity is—

(a) each customer’s transformer capacity in the 12 months prior to 17 May 2016; or
(b) each customer's line capacity in the 12 months prior to 17 May 2016; or

(c) each customer's gross anytime maximum demand in the 5 years prior to 17 May 2016.

25. If clause 24(c) applies, the TPM must specify whether gross anytime maximum demand for a customer is—

(a) the customer's highest gross demand in the 5 year period; or

(b) the average of the customer's highest gross demand in each of the 5 years; or

(c) the average of the customer's 5 highest gross demands in the 5 year period; or

(d) another measure of gross anytime maximum demand.

26. To the extent practicable, and to the extent that the transaction costs of doing so would not be prohibitive, gross anytime maximum demand calculated under clause 24(c) must be anytime maximum demand, including—

(a) the quantity of electricity generated by generation connected to the customer's network; and

(b) the volume of demand-side management and demand response on the customer's network.

27. Clause 28 applies if—

(a) a period of time (in years) specified in the TPM for the purposes of this clause and clause 28 has elapsed since the guidelines were published; and

(b) there has been a material change in circumstances.
### Overhead and unallocated operating expenses

**Overheads**

2730. The TPM must provide for Transpower's overhead and unallocated operating expenses to be recovered—

(a) from generation designated transmission customers; through the connection charge; and

(b) from load designated transmission customers; through the residual charge.

2831. The overheads and unallocated operating expenses must be allocated on substantially the same basis, and with the same effect, as the TPM in force on the date of these guidelines.

### Allocation of charges to new designated transmission customers

29. The TPM must provide that, to the extent necessary, if a designated transmission customer connects assets at a connection location where the customer does not already have

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Proposed clause 32 is redundant as all designated transmission customers will be subject to the same rules regardless of when they became a designated transmission customer.
We do not consider the level of detail in proposed paragraph 33 is needed in the Guidelines. We have suggested a more generic approach, but even that is probably unnecessary (the existing TPM guidelines do not address this point at all).

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<th>assets connected to the grid (including a new connection location), Transpower must determine the area-of-benefit and residual charges for the customer using Transpower’s estimate of the customer’s likely offtake or injection at the connection location had the customer’s assets been connected at the connection location for the relevant period.</th>
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<td>32.</td>
<td>The TPM must allocate charges to a person that becomes a designated transmission customer after the new TPM comes into force on the same basis as if the customer was an existing customer on the date the new TPM takes effect.</td>
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<td>33.</td>
<td>The area-of-benefit and residual charges for a new designated transmission customer must be based on a proxy for, but must not be dependent on, the physical capacity after the participant becomes a designated transmission customer.</td>
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We have combined proposed clauses 34, 35 and 36 to reflect that proposed clauses 35 and 36 are (relatively minor) modifications to the existing prudent discount policy.

**Prudent discount policy**

3034. The TPM must include a prudent discount policy on the same basis (and with the same effect) as the prudent discount policy in the TPM in force on the date of these guidelines, except that the policy must provide that— as provided for in clauses 35 to 41.

(a)35. The TPM must provide that, subject to clause 39(b), a prudent discount would apply for the expected remaining life of the grid assets the alternative project would bypass to which the prudent discount relates, unless a shorter prudent discount is agreed between Transpower and the designated transmission customer party receiving the prudent discount;

and-

(b)36. an alternative project may be or include new generating plant. The TPM must provide that a prudent discount would be available if it is privately beneficial for a load designated transmission customer to build generation to disconnect from the grid, but not efficient and not for the long-term benefit of consumers.
We have moved these clauses up to come before the plant close down prudent discount policy, which we do not consider should be in the TPM.

We have deleted proposed paragraph (b) because Transpower’s costs finish at the points of connection to the grid. Transpower does not incur costs specific to distributor customers.

3140. The TPM must—

(a) provide that a prudent discount is available to a load designated transmission customer if the charges allocated to the customer’s transmission charges exceed Transpower’s standalone cost of delivering electricity to the load designated transmission customer; and

(b) provide that a prudent discount will be available to a distributor in respect of a load customer of the distributor if Transpower is satisfied that, if the load customer was a direct consumer, the prudent discount would be available on the basis specified in paragraph (a); and

(bc) include a method for determining whether Transpower’s standalone cost is exceeded for the purposes of paragraph (a) this clause.

3241. The TPM must provide that any prudent discount must not result in a designated transmission customer paying charges that are less than Transpower’s incremental cost of supplying the customer with transmission services.
We do not consider the TPM should include the plant close down prudent discount policy. See section 3.4 of our submission.

Despite that, we have suggested some self-explanatory, and we consider necessary, changes to the policy if the Authority decides it should be included in the TPM (the italics are to indicate that our principal submission is the policy should be deleted).

If the policy is included in the Guidelines then it should be as an “additional component” only.

3337. The TPM must provide that a prudent discount would beis available to a direct consumer if—

(a) the direct consumer’s transmission charges are an amount that represents a material portion of the direct consumer’s input costs and/or business profits; and

(b) there is a material risk that transmission charges would cause the direct consumer to close down its New Zealand grid-connected plant (and so disconnect the plant from the grid); and

(c) another operator is unlikely to take over the operation of the plant (and so keep the plant connected to the grid); and

(d) the direct consumer’s business profits have been heavily affected by market conditions in a market for its inputs or outputs; and

(e) the direct consumer has taken reasonable steps to remain viable as a going concern, including taking significant steps to eliminate unnecessary costs.

3438. The TPM must provide that a prudent discount would beis available to a distributor if the distributor can demonstrate that there is a material risk that—

(a) there is a material risk that the transmission charges allocated to the distributor would cause one of the distributor’s customers to disconnect from the distributor’s network; and

(b) the disconnection cannot reasonably be avoided by the distributor providing its own prudent discount to the customer or changing its distribution pricing methodology; and
(cb) if the distributor's customer were a direct consumer in the same circumstance as described in clause 337, the distributor's customer would be eligible to receive a prudent discount of its charges.

3539. A prudent discount under clause 337 or 348 must—

(a) be linked to key factors that would have a material effect on the decision to disconnect from the grid or distribution network (for example, the world price of the product or service produced by the customer); and

(b) be able to be reduced, suspended or terminated if the key factors relied on in granting the prudent discount change such that the prudent discount would not have been granted, or would not have been granted on the same basis.

This clause reflects that the body that administers the plant close down prudent discount policy is unlikely to have the specialist expertise in-house to make the necessary assessments.

Transpower considers itself to be in that position, and we suggest the Authority is too.

36. A prudent discount under clause 33 or 34 may only be granted where—

(a) advice from a restructuring and insolvency firm has confirmed the requirements in clause 33 have been met; and

(b) designated transmission customers have been consulted on the basis for the prudent discount.
<table>
<thead>
<tr>
<th>Clause</th>
<th>Description</th>
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<tbody>
<tr>
<td>37.</td>
<td>The TPM may provide for a prudent discount referred to in clause 33 or 34 to be granted by a person other than Transpower, which person must be a Crown entity with regulatory responsibility for the electricity industry.</td>
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<tr>
<td>38.</td>
<td>The TPM must include methods and processes for Transpower’s assessing assessment of applications for, and calculating of, prudent discounts that Transpower is responsible for granting in the circumstances described in clauses 35 to 41.</td>
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### Additional components

39. The TPM must include a kVar charge on reactive load. Any or all of the following additional components if, in Transpower’s opinion, its inclusion is practicable and consistent with the requirements of clause 12.89 of the Code:

- **(d)** a long-run marginal cost (LRMC) charge that—
  - (i) is designed to promote the efficient use of Transpower’s grid assets that are not connection assets, so as to efficiently defer investment; and
  - (ii) complements or augments, but does not duplicate, the price signals provided by nodal pricing and other charges under the TPM;

- **(e)** a kVar charge on reactive load.

44. If an LRMC charge is included in the TPM, the TPM must specify that the purpose of the LRMC charge is to promote a change in the use of the interconnected grid in order to efficiently defer investment, after taking account of nodal prices and other...
transmission charges.

| 45. | Transpower may only include an LRMC charge in the TPM if a price signal over and above the price signal provided by nodal pricing (or that could be provided by nodal pricing with direct refinements to the spot electricity market) and other transmission charges is necessary to promote efficient investment in, and use of, the interconnected grid. |
| 46. | If a kVar charge is included in the TPM, the TPM must specify the circumstances in which the kVar charge would apply and in which regions. |

This clause is not appropriate because it requires Transpower to keep certain provisions under continuous monitoring. Timing of TPM operational reviews are at Transpower’s discretion, in consultation with stakeholders.

| 47. | If Transpower does not include any of the additional components in the TPM initially developed under these guidelines, it would be desirable for Transpower to keep each of the components not included under review and consider, whether to propose a variation under clause 12.85 of the Code to include any one or more of them. |

The substantial price impacts, including price shocks, reflected in the Authority’s indicative prices suggest it may be desirable to include a transition period in the TPM. The current TPM guidelines contain a similar provision.

| Transition | 41. The TPM may provide for the phasing in of the area-of-benefit charge, LRMC charge, residual charge and kVar charge (if any) over a period or periods from the commencement of the TPM. |