

Proposal to amend the Electricity Industry Participation Code 2010

Send to info@ea.govt.nz or fax to 04 4608879

This form is to propose:

- x An amendment to an existing clause in the Electricity Industry Participation Code 2010; or
- A new clause in the Electricity Industry Participation Code 2010.

Please complete as many sections of this form as possible and email or fax it to the above number/email address. The more information you include in your proposal, the faster your proposal will be able to be assessed/progressed.

Proposer's details

Name:	Rebecca Osborne
Position in company:	Head of Grid Pricing
Company:	Transpower New Zealand Limited
Telephone:	04 590 8638
Email address:	rebecca.osborne@transpower.co.nz
Signature:	A.
Date:	13 October 2022

The proposal / preferred option

Suggested proposal name (please keep it short)	Transmission pricing methodology (TPM) – Simple method regional customer groups with RNPB = 0
State the objective of your proposal.	To correct an omission in the TPM whereby a customer joining an empty RNPB = 0 regional customer group under the simple method will never pay BBCs for some low-value BBIs , and to correct a related problem that would result in a divide by zero error in the calculation of the customer's simple method factor (SMF).

Does the proposal relate to an existing Code clause? If yes, please state the full clause reference.	Yes. TPM clause 83.
Describe the specific amendment(s) that you propose be made to the Code <i>OR</i> attach a draft of the proposed Code amendment (optional). Note the <u>Code drafting manual</u> provides guidance on drafting.	The proposed amendment is tracked in the amended TPM accompanying this form. When the TPM was drafted it was assumed every regional customer group under the simple method would have at least one member and RNPB > 0 in respect of all investment regions. However, for the first simple method period there are some empty regional supply groups with RNPB = 0 in respect of some investment regions (because the modelled regions for the groups had no generation during CMP C for the first simple method period). In the rest of this form, we have used "RNPB = 0" as shorthand for "RNPB = 0 in respect of one or more investment regions". If a customer joins an empty regional customer group with RNPB = 0, that customer's individual NPB for some low-value BBIs would be 0 (clause 61(1)). This would not change even if the relevant modelled regional customer group has a non-zero value of RNPB (clause 61(4)). This means any customer who joins while RNPB = 0 will
	never receive a BBC allocation for some low-value BBIs. We propose an amendment to the TPM to specify a formula to calculate a positive RNPB value for any empty regional customer group under the simple method that has RNPB = 0 at the time a customer joins it (clause 83(12) to (14)). The calculated value will be the average RNPB per IRA unit value for other regional supply groups or regional demand groups (as the case may be) with current members multiplied by the new customer's estimated IRA value and "distributed" across the relevant investment regions (because each regional customer group under the simple method has a different RNPB value in respect of each investment region).
	 While there are potentially other methods that could be applied to calculate a positive RNPB value, we consider our proposed method to be appropriate given the limited scope of the problem, and note the method indirectly incorporates the full logic for the simple method allocations by using an average of the RNPB values of other regional customer groups. For example, assume for a simple method period there are three regional customer groups (RCG A, B and C, all of the same type*) with the following RNPB values in respect of each investment region (IR A, B and C) and total IRA values for all existing customers in each group:

		RCG A	RCG B	RCG C
	IR A	RNPB = <mark>50</mark> ∑IRA = 10	RNPB = 100 ∑IRA = 20	RNPB = <mark>25</mark> ∑IRA = 0
	IR B	RNPB = <mark>50</mark> ∑IRA = 10	RNPB = <mark>25</mark> ∑IRA = 20	RNPB = <mark>0</mark> ∑IRA = 0
	IR C	RNPB = <mark>50</mark> ∑IRA = 10	RNPB = <mark>50</mark> ∑IRA = 20	RNPB = <mark>0</mark> ∑IRA = 0
	If a customer with an estimated IRA value of 5 joins RCG C, that group's RNPB value in respect of IR B and IR C (the investment regions in respect of which RNPB = 0) would be calculated as follows: IR B: RNPB = $325/3 \times 30 \times 5 \times 75/175 = 7.738$			e investment
	 IR C: RNPB = 325/3 x 30 x 5 x 100/175 = * The assumption that all the groups are of the simplify the example. In practice there will be a regional supply group for each modelled region Regions A, B and C in this example are not the clause 64(5) of the TPM. Related to this, we also propose an amend to avoid a divide by zero error in the calcul first customer joining a previously empty regioner if RNPB > 0 for that group). 		are of the same type e will be a regional of led region except th re not the same reg in amendment to of he calculation of the empty regional cu	demand group and e HVDC link. ions illustrated in clause 83(3)(b)(ii) he SMF for the
Identify how your proposal would support the Authority's objective, as set out in section 15 of the Electricity Industry Act 2010 (Act) ⁱ , specifically addressing the competition, reliability and efficiency dimensions of the objective.	The proposed amendment will correct omissions in the TPM that could result in some customers never paying BBCs for some low- value BBIs, which may create inefficient incentives as to the location of new load or generation based on avoiding transmission charges. This will support the efficiency limb of the Authority's statutory objective.			
Which of the purposes listed in section 32(1) of the Act does your proposal most closely relate to?	32(1)(c): Efficient operation of the electricity industry 32(1)(e): Other matter specifically referred to in the Act as a matter for inclusion in the Code (section 32(2)(b): "pricing methodologiesfor Transpower")			

Identify whether you consider your proposed change to be urgent, providing supporting rationale.	We consider the proposed amendment qualifies to be, and should be, progressed under section 39 of the Act (being technical and non- controversial) assuming they can be made within the timeframe noted below. We consider the proposed amendment also qualifies to be made urgently (under section 40). That is, the proposed amendment has potential implications for the calculation of transmission charges for pricing year 2023/24, and as a result, it is necessary and desirable in the public interest for the proposed amendment to be progressed urgently. We consider the proposed amendment should be progressed under section 40 if it would not otherwise be made within the timeframe noted below. The amendment would need to be confirmed by the end of October at the latest to be considered in our assurance process for transmission charges for pricing year 2023/24, which will be notified to customers in December. The amendment would need to take effect on 1 April 2023 to be part of the TPM when it comes into force.
Please set out the expected costs and benefits of your proposal. These should include your assessment of the direct cost to develop and implement the proposed Code amendment, and the consequential costs and benefits as a result of the amendments, to all affected parties.	No material costs. Unquantified benefits for all consumers and other stakeholders from avoiding potential inefficient incentives as to the location of new load or generation.
Who is likely to be substantially affected by this proposal?	All owners of future load or generation.
 Identify whether you consider (providing supporting rationale): (i) your proposed change to be technical and non- controversial; or (ii) there is widespread support for your proposed change among the people likely to be affected; or (iii) there has been adequate prior consultation so that all relevant views have been considered. 	We consider the proposed amendment to be technical and non- controversial. The proposed amendment is consistent with the intent of the TPM. This is because the changes and the introduction of a new formula to provide a positive RNPB value when required are being proposed to fix errors, in a manner that is in our view consistent with the rationale behind the simple method calculation in the TPM.
Why this is your proposed option?	The TPM needs to change to ensure all future load and generation receives BBC allocations for all low-value BBIs. We consider the proposed methods for calculating RNPB and avoiding the divide by zero error to be sensible and pragmatic.

Any other relevant information you would like the Authority to consider.	The TPM is a complicated document and was drafted in a short amount of time. It was anticipated that some early changes to the drafting may be required. <u>The Electricity Industry Participation Code</u> <u>Amendment (Transmission Pricing Methodology Related</u> <u>Amendments) 2022</u> was made with this in mind. Clause 12.94A(b) of the Code allows the Authority to make urgent changes to the TPM outside the normal TPM review and amendment process.
--	---

Assessment of alternative options

Please list and describe any alternative means of achieving the objective you have described for your proposal. For each alternative, please provide the information in the table below (i.e. repeat this table below for each alternative). The list of alternatives should include both regulatory (i.e. Code amendments) and non-regulatory options (e.g. education, information, voluntary compliance). If you have a preferred option please identify it and explain why it is your preferred option.

Brief description of an alternative means of achieving the objective. Note if this is your preferred option.	Calculate RNPB by carrying out a retrospective power flow analysis that assumes the new load or generation was present during CMP C. This approach would involve Transpower in a contentious "retrospective forecast" of power flows and require the exercise of discretion. Further, the modelled regions would need to be held constant for the power flow analysis which is inconsistent with the simple method.
The extent to which the objective of your proposal would be promoted or achieved by this option.	This option would achieve the objective of the proposal.
Who is likely to be substantially affected by this option?	All owners of future load or generation.
The expected costs and benefits of this option, including direct costs to develop it, and consequential costs and benefits to all affected parties.	Unquantified (but likely material) costs to carry out the power flow analysis and defend against challenges to it. Unquantified benefits (relative to the status quo) for all consumers and other stakeholders from avoiding potential inefficient incentives as to the location of new load or generation.

^{*i*} Section 15: 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.