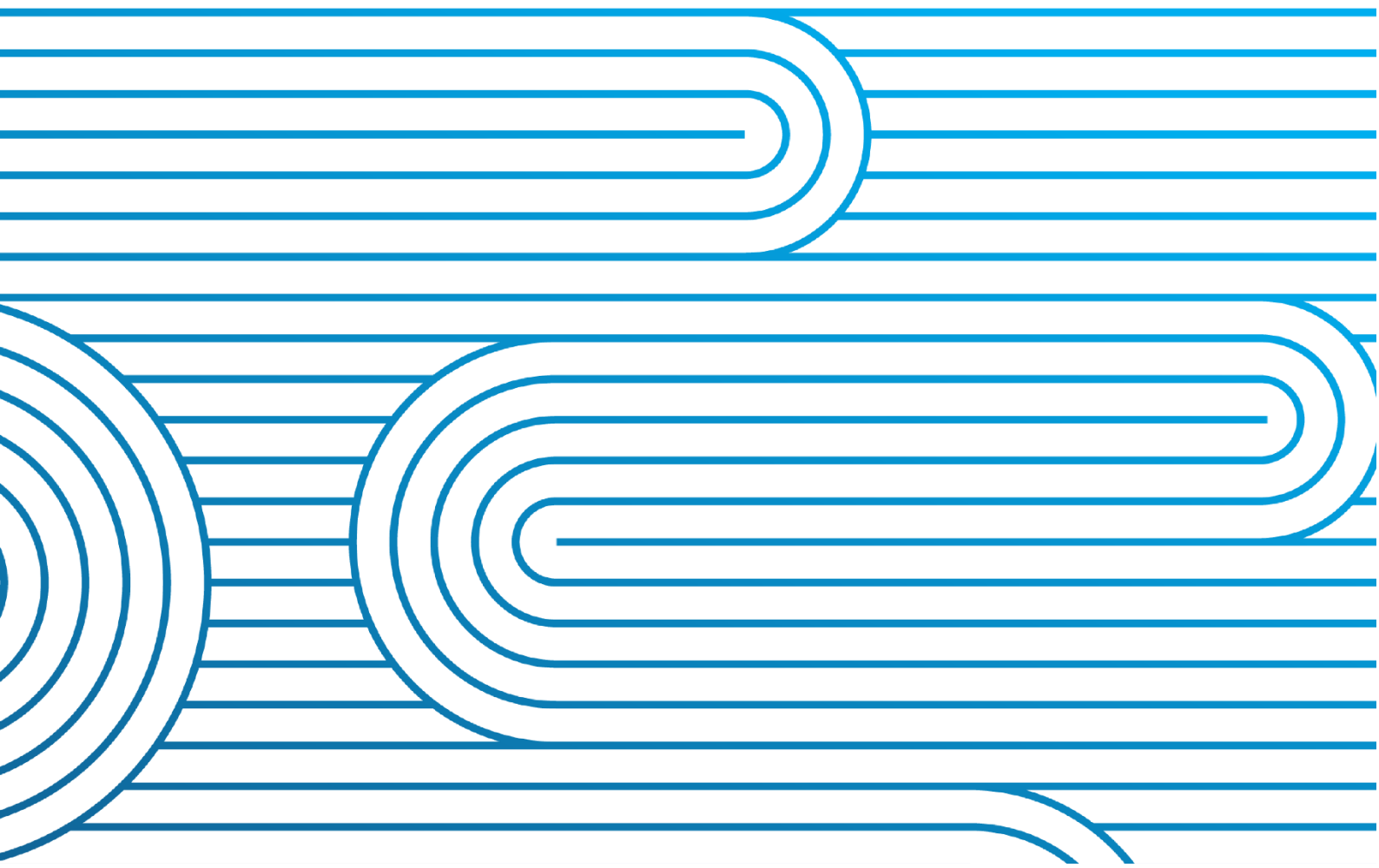


# Settlement Residual Allocation Methodology (SRAM)

Submission by Transpower New Zealand Limited

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## 1. Executive summary

1. Transpower appreciates the opportunity to submit in response to the Electricity Authority's settlement residual allocation methodology (**SRAM**) consultation paper.<sup>1</sup>
2. Transpower prefers option D in the SRAM Consultation Paper.
3. The Clearing Manager should allocate settlement residue (the funds remaining after all wholesale electricity market (**WEM**) transactions have been settled by the Clearing Manager) to WEM purchasers directly, in proportion to their WEM purchases each month, i.e. option D.
4. Transpower as grid owner should have no role in the allocation process for amounts arising in the WEM.
5. While the introduction of a new transmission pricing methodology (**TPM**) may provide an opportunity to revisit the approach to allocation of loss and constraint excess (**LCE**) or "settlement residual", particularly given it was a topic that has been consulted on multiple times already thorough-out the TPM Guidelines review, there is no need for settlement residue to be allocated using a TPM-based method.
6. However, if the Authority decides to adopt a TPM-based approach, we consider the allocation should be in proportion to residual charges. This would ensure the SRAM does not distort transmission or nodal pricing signals. This approach would have the same outcome as deducting settlement residue from Transpower's total recoverable revenue. Revenue to be recovered from transmission customers would therefore be 'net of' settlement residue.
7. Either option D or allocating in proportion to residual charges would avoid the large wealth transfers from load to generation that would arise from option B in the SRAM Consultation Paper, which appears to be the Authority's preferred option at this stage.
8. Finally, on the question of pass-through, neither Transpower nor the Clearing Manager should have any involvement in whatever the parties to whom settlement residue is allocated then do with it. For example, it would not be appropriate for Transpower or the Clearing Manager to regulate, monitor or investigate whether settlement residue has been passed-through by distributors to either retailers or end-consumers.

## 2. Problem definition

9. We do not agree with how the Authority has defined the "basic problem" the SRAM needs to address.
10. The Authority says "*Due to its reliance on the current TPM, Transpower's current allocation approach is expected to become obsolete after April 2023*"<sup>2</sup>
11. While it is true Transpower's current LCE allocation policy (the equivalent of a SRAM) contains terminology that will not align with the new TPM, identifying that fact does not provide any guidance as to what the SRAM should be going forward. In fact, the way the Authority has stated the problem may be unhelpful in so far as it suggests Transpower's LCE allocation policy needs to

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<sup>1</sup> [Settlement Residual Allocation Methodology: principles, options and pass-through: Consultation paper](#), 18 January 2022 (**SRAM Consultation Paper**).

<sup>2</sup> SRAM Consultation Paper, paragraph 2.4.

continue in some modified form along with Transpower's involvement in allocating settlement residual in a TPM-based way.<sup>3</sup>

12. Going back to first principles, we consider the underlying problem is that consumers pay more for electricity than generators receive. In TPM Guidelines' language, purchasers pay more for electricity than the stand-alone cost of generating it. The role of the SRAM should be to close the gap between what consumers (ultimately) pay and the cost of electricity generation, and to do so in the most direct way possible without undermining transmission or nodal price signals.

### 3. New decision-making principles

13. The Authority has proposed four new decision-making principles for allocating settlement residue. It is unclear why the Authority has done this instead of continuing to apply its decision-making and economic (DME) framework that it has used throughout the TPM review.
14. We think the Authority should be cautious about creating new decision-making principles when it undertakes new consultations. There is a risk using different principles for different decisions will cloud or pre-determine the Authority's thinking, resulting in regulation that is inconsistent and unpredictable.
15. This concern is more than academic. For example, in its 2014 LCE working paper, the Authority concluded that deducting settlement residue from Transpower's total recoverable revenue – equivalent to allocating it on the basis of residual charges – *"would be a market-based approach to recovering Transpower's costs, and therefore the most preferred charging approach under the Authority's decision-making and economic framework under the TPM"*.<sup>4</sup> What appears to be the Authority's preferred approach now (option B in the SRAM consultation paper) is different, presumably driven by the new decision-making principles.
16. We make the following specific observations about the new decision-making principles:
  - 16.1 Principle 1 (integrity of nodal pricing) has been a primary area of focus in the Authority's previous LCE consultations. We consider that the prior emphasis is entirely appropriate as integrity of nodal pricing goes to the heart of LCE allocation. The LCE Working Paper went into some depth considering *"how traders may formulate their offer strategy by simultaneously optimising spot market outcomes and transmission charges"* and the implications for LCE allocation.<sup>5</sup> The SRAM consultation paper has re-orientated the primary focus to transmission pricing issues (see section 4 below).
  - 16.2 Principle 2 should be broadened to protecting the integrity of the new TPM rather than just the integrity of benefit-based charges.
  - 16.3 Principle 1 (integrity of nodal pricing) and principle 3 (mitigation of volatility) conflict with each other because volatility is an integral part of nodal pricing. For example, MDAG has been clear *"spot price volatility which reflects underlying economic conditions is not a flaw; on the contrary, it is signalling real changes in the cost of supply to meet changing levels of demand"*.<sup>6</sup>

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<sup>3</sup> We note the current LCE allocation policy is a Transpower-controlled document and its modification does not require a Code change. As we said in our response to the Authority's 2019 issues paper, it would be a relatively straightforward exercise to update the LCE allocation policy to be consistent with the new TPM, if a TPM-based allocation were preferred.

<sup>4</sup> [Transmission pricing methodology: Use of LCE to offset transmission charges: Working paper](#), 21 January 2014 (LCE Working Paper), paragraph 8.5.

<sup>5</sup> LCE Working Paper, section 7.

<sup>6</sup> [Price Discovery Under 100% Renewable Electricity Supply: Issues Discussion Paper](#), 2 February 2022, paragraph 5.46.

- 16.4 Principle 3 also does not align with the Authority’s position that “*avoiding high or volatile wholesale electricity prices does not provide the justification for including a TCC in the proposed TPM*”.<sup>7</sup> If reduction in volatility is not a relevant criterion for a transitional congestion charge, why would it be relevant to the SRAM? As it stands, it is unclear that principle 3 should be used.
- 16.5 Principle 4 (full cost recovery) trumps the others. Principle 4 is the most important principle and cannot be traded off against the other principles.

## 4. Consistency with TPM Guidelines decision

17. As principle 2 in the SRAM Consultation Paper identifies, the SRAM should work harmoniously with the new TPM and not undermine its policy objectives. We consider this means settlement residue allocation should not interfere with the pricing signals that the Authority expects from adoption of benefit-based charges, and should not work against any of the pricing constraints in the TPM Guidelines e.g. the Guidelines provide very limited circumstances in which benefit-based charges aren’t required to recover covered costs in full.
18. However, the discussion at paragraph 3.9 of the SRAM Consultation Paper suggests the Authority considers there is a problem with the way benefit-based charges work which the SRAM could fix; specifically, circumstances where “*a grid user whose expected use of the grid is – and so its benefit-based charges are – low, but whose use of the grid increases rapidly and unexpectedly*”. The TPM Guidelines were deliberately specified to ensure benefit-based charges are largely fixed and do not change simply because a customer’s use of the grid is more (or less) than expected. The Authority has stated “*it would promote efficient investment and the efficient operation of the electricity industry for the benefit-based charge to generally have a fixed allocation, which could be revised in certain limited circumstances*”.<sup>8</sup>
19. The discussion at paragraph 3.9 of the SRAM Consultation Paper also implies the SRAM could help fill the gap from an absence of a congestion charge in the proposed TPM by ensuring “*the user whose usage had grown rapidly would bear a higher share of the cost of congestion before the investment (due to their proportionately small rebate) and after the investment (due to their proportionately higher BB allocation)*.” One of the reasons a permanent congestion charge was not provided for in the TPM Guidelines was that benefit-based charges coupled with nodal pricing would do the heavy lifting in terms of sending efficient pricing signals, rendering other pricing signals redundant or duplicative.<sup>9</sup>

## 5. Wealth transfers

20. Option B in the SRAM Consultation Paper would result in large wealth transfers from load to generation which the Authority estimates to be \$30m per annum. At the moment, most settlement residue is allocated to consumers, but this would change to most being allocated to generators. This is highlighted in figure 2 in the SRAM Consultation Paper, comparing the bars for “2020/21 LCE” with those for “Simple BB”.

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<sup>7</sup> Letter from Authority to Transpower, [Transpower’s TCC Checkpoint 1 resubmission](#), 4 February 2021.

<sup>8</sup> [Transmission pricing methodology 2020 Guidelines and process for development of a proposed TPM: Decision](#), 10 June 2020 (**Guidelines Decision Paper**), paragraph 9.83.

<sup>9</sup> Guidelines Decision Paper, paragraphs 14.23 and 14.24.

21. If the Authority chooses option B, it will be important for the Authority to satisfy itself these wealth transfers are justified by material efficiency improvements. The same is true for any SRAM option that would result in significant wealth transfers.
22. It could harm the durability of the new TPM if wealth transfers arising from SRAM changes harm consumers and/or exceed efficiency benefits.

## 6. Option D is Transpower's preferred option

23. Our preference remains<sup>10</sup> that the Clearing Manager return settlement residue to WEM purchasers directly in proportion to their energy purchases each month. We support option D in the SRAM Consultation Paper, or some variation of it.<sup>11</sup>
24. We consider this is the best option because, first:<sup>12</sup>

As we submitted in response to the Authority's RTP Remaining Elements Proposal (April 2019), given that the FTR grid is an increasingly close approximation of the whole grid, we do not think the administrative cost of having Transpower allocate residual LCE (the part of total LCE not required for the settlement of FTRs) is justified. The task of allocating residual LCE should go to the clearing manager, who could allocate it to wholesale market purchasers in proportion to their payments as part of the normal monthly clearing process.
25. Second, LCE arises from *"consumers [paying] more for electricity than generators receive"*.<sup>13</sup> Consistent with our discussion of the problem definition above and principle 1 in the SRAM Consultation Paper, the Authority's focus should be on determining the least distortionary and most direct way to return settlement residue to purchasers, rather than on how settlement residue might be used to modify transmission pricing outcomes under the new TPM. Settlement residue allocation does not need to be, and should not be, linked to the new TPM.
26. Further, under an option D scenario, the Clearing Manager, not Transpower, has the data needed *"to calculate the appropriate rebates in respect of each wholesale electricity purchaser in accordance with the SRAM"*.<sup>14</sup> If Transpower were given this task (under option D) it would bring unnecessary complexity and cost as Transpower would need to implement systems to receive the data from the Clearing Manager, process it, and send it on/back to whichever participants need it. Transpower would have no other use for the data.
27. Transpower should only have responsibilities relating to settlement residue allocation if the Authority opts for a TPM-based SRAM.
28. Neither Transpower nor the Clearing Manager should have any involvement in whatever the parties to whom settlement residue is allocated then do with it. In our view, it is not the appropriate role of Transpower or the Clearing Manager to administer or enforce pass-through of settlement residual by electricity distributors.

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<sup>10</sup> [Transpower's submission](#) on *Remaining elements of real time pricing: Consultation paper*, 30 April 2019; [Transpower's submission](#) on 2019 Issues Paper (Attachment C, Q61), 1 October 2019.

<sup>11</sup> There are a number of different allocator options worth considering, including dollar value and volume.

<sup>12</sup> [Transpower's submission](#) on 2019 Issues Paper (Attachment C, Q61), 1 October 2019.

<sup>13</sup> SRAM Consultation Paper, paragraph 2.1.

<sup>14</sup> SRAM Consultation Paper, paragraph 5.10.

## 7. A residual charge option is better than a benefit-based charge option

29. If the Authority opts for a TPM-based SRAM, we consider residual charges, not benefit-based charges, should be used as the allocator.
30. Allocating settlement residue based on residual charges would be equivalent to using the settlement residue to offset Transpower's total recoverable revenue, which has been considered in previous Authority consultations on this topic (see paragraph 15 above).<sup>15</sup>
31. Allocating settlement residue based on residual charges would also have the following advantages:
  - 31.1 It would directly address the underlying problem discussed at paragraph 12 above - that *"consumers pay more for electricity than generators receive"* - by returning settlement residue to load rather than generation. We are mindful any allocation of settlement residue to generators would mean they receive greater compensation for their generation than is required to clear the market, and would lock in the wedge between the price consumers pay and the net price generators receive.
  - 31.2 It would avoid the SRAM distorting nodal prices to generators and, consequently, impacting generators' offer strategies and behaviour. The Authority has previously raised these types of issues. For example, in the LCE Working Paper the Authority expressed its concern that *"Generators ... may have the incentive and ability to game the system by modifying their offers to take the treatment of LCE into account"* and *"some parties may have both the incentives and ability to inefficiently 'game' the spot market to alter the creation and allocation of LCE in order to reduce their transmission charges. This may be at the expense of other participants"*.<sup>16</sup>
  - 31.3 It would not water down the policy objectives behind benefit-based charges. All of options A, B and C in the SRAM Consultation Paper would effectively result in beneficiaries paying less than the covered cost of benefit-based investments through benefit-based charges, and therefore under-signal transmission costs. This is because settlement residue would effectively be deducted from benefit-based charges under the Authority proposal. This would effectively mean WEM purchasers (the source of the settlement residue) would subsidise benefit-based investments. The TPM Guidelines specify only limited circumstances where benefit-based charges are not required to recover the entire covered cost of benefit-based investments.

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<sup>15</sup> A variation would be to apply settlement residue originating from connection assets against connection charges for those assets, and allocate the remaining settlement residue based on residual charges (consistent with option 2 in the LCE Working Paper). Our preference would be to allocate on the basis of residual charges only, but we consider either LCE Working Paper option would be superior to options A, B and C in the SRAM Consultation Paper.

<sup>16</sup> LCE Working Paper, paragraphs 1.5 and 1.10.