# **CONSULTATION PAPER**

# Benchmark agreement and SRAM related Code changes

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# **Executive Summary**

In November 2022, the Authority decided on a Code change giving effect to a new settlement residual allocation methodology (SRAM), which applied from 1 April 2023. The decision required Transpower to develop a SRAM which calculates allocations of settlement residue for each designated transmission customer based on the simple method for the benefit-based charge in the Transmission Pricing Methodology (TPM).

From May 2023, Transpower is required to pay settlement residue to its customers in accordance with the SRAM. Distributors that receive settlement residue payments (settlement residual rebates) are required to pass these through to their own customers.

This consultation paper sets out some proposed Code amendments that are a consequence of the Authority's November 2022 SRAM decision.

#### **Transpower funding for SRAM implementation**

Transpower cannot be funded for carrying out SRAM allocations through the Commission's regulatory revenue-setting process, as administering the SRAM is not a regulated service under Part 4 of the Commerce Act 1986. This, as well as the Authority's commitment to ensuring Transpower will be able to recover its efficiently incurred cost of administering the SRAM, is set out in the Authority's letter to Transpower from December 2022.<sup>1</sup>

The Authority proposes to amend the Electricity Industry Participation Code 2010 (Code) and the benchmark agreement to include a clause in the benchmark agreement to allow Transpower to recover its efficiently incurred costs in relation to SRAM implementation. The proposed amendment would allow Transpower to recover implementation costs from all transmission customers. The Code would also be amended to deem these cost recovery provisions to be included in all existing transmission agreements, including certain pre-2008 agreements which are not based on the benchmark agreement (those mentioned in clause 12.49 of the Code).

#### Focused changes to benchmark agreement

Alongside these changes, the Authority is proposing changes to the benchmark agreement to make it consistent with the new TPM, and to make other minor and technical changes.

The Authority is proposing adding the benchmark agreement into the Code as its own Schedule and to update its name to be referred to as 'default transmission agreement'. This new name more clearly reflect the benchmark agreement's purpose, which is to set out the prescribed default terms and conditions in the Code that are deemed to be included in transmission agreements as per section 44(2) of the Electricity Industry Act 2010 (Act).

The minor and technical changes will also be deemed to be included in all transmission agreements based on the benchmark agreement.

#### Settlement residue payments with respect to embedded networks

We are also seeking feedback from stakeholders on an issue that has arisen around the passthrough of settlement residual rebates with respect to embedded networks.

Letter from Sarah Gillies to Alison Andrews, 21 December 2022
https://www.ea.govt.nz/documents/1399/21\_Dec\_2022\_Letter\_from\_EA\_to\_TP\_-\_Funding\_for\_SRAM.pdf

#### **Next steps**

Following consideration of submissions, the Authority will decide whether to:

- amend the Code and the benchmark agreement to provide for Transpower's recovery of SRAM implementation costs from all transmission customers and to deem these amendments to be included in all existing transmission agreements
- amend the benchmark agreement to make it consistent with the new TPM and to make
  other minor changes to reflect other law changes and to deem these amendments to be
  included in all existing transmission agreements other than the pre-2008 agreements set
  out in clause 12.49 of the Code.

In 2024 the Authority intends to conduct a more comprehensive review of the benchmark agreement as part of its Future Security and Resilience (FSR) work. This could include extending the requirement to enter into transmission agreements that are consistent with the benchmark agreement to those who are currently exempt from this requirement (pre-2008 agreement customers).

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#### 1. Introduction

#### SRAM and TPM related Code changes

- 1.1 After the new TPM was introduced on 1 April 2023, Transpower's existing method for allocating settlement residue needed to be updated to reflect the changes in the TPM. The settlement residue is the remainder of the wholesale market loss and constraint excess (LCE) and Financial Transmission Rights (FTR) auction revenue after FTR payments have been made.
- 1.2 Following consultation, the Authority released its decision paper on the new SRAM on 15 November 2022. The decision paper outlines the Authority's decision to amend the Code to provide for the development of a new SRAM, based on the simple method for allocating the benefit-based charge in the TPM. It also introduces requirements on Transpower to make payments of settlement residue (settlement residual rebates) to its customers in accordance with the SRAM (from May 2023), and for distributors to pass through these rebates to their own customers.
- 1.3 On February 14, 2023, the Authority announced its intention to propose amendments to the benchmark agreement and the Code, with the aim of enabling Transpower to recover its efficiently incurred costs in implementing the SRAM. Additionally, the Authority disclosed its plan to review the benchmark agreement in two stages:
  - (a) Stage 1: a narrow review of SRAM-related Code amendments and changes to reflect the new Transmission Pricing Methodology (TPM)
  - (b) Stage 2: a broader review of the benchmark agreement and sector changes over the past 15 years.
- 1.4 This consultation paper outlines the proposed amendments for the stage 1 review of the benchmark agreement.
- 1.5 This consultation paper also outlines an issue that has arisen around the pass-through of settlement residual rebates with respect to embedded networks.

#### How to make a submission

- 1.6 The Authority's preference is to receive submissions in electronic format (Microsoft Word) in the format shown in Appendix B. Submissions in electronic form should be emailed to <a href="mailto:network.pricing@ea.govt.nz">network.pricing@ea.govt.nz</a> with "Consultation Paper—" in the subject line.
- 1.7 If you cannot send your submission electronically, please contact the Authority (network.pricing@ea.govt.nz or 04 460 8860) to discuss alternative arrangements.
- 1.8 Please note the Authority intends to publish all submissions it receives. If you consider that the Authority should not publish any part of your submission, please:
  - (a) indicate which part should not be published,
  - (b) explain why you consider we should not publish that part, and
  - (c) provide a version of your submission that the Authority can publish (if we agree not to publish your full submission).
- 1.9 If you indicate part of your submission should not be published, the Authority will discuss this with you before deciding whether to not publish that part of your submission.
- 1.10 However, please note that all submissions received by the Authority, including any parts that the Authority does not publish, can be requested under the Official Information Act 1982. This means the Authority would be required to release material not published unless

good reason existed under the Official Information Act to withhold it. The Authority would normally consult with you before releasing any material that you said should not be published.

#### When to make a submission

- 1.11 Please deliver your submission by 5pm on Friday 30/06/2023
- 1.12 Authority staff will acknowledge receipt of all submissions electronically. Please contact the Authority <a href="mailto:network.pricing@ea.govt.nz">network.pricing@ea.govt.nz</a> or 04 460 8860 if you do not receive electronic acknowledgement of your submission within two business days.

## Supporting information

1.13 The following table provides links to key information that may be helpful to stakeholders in their consideration of this consultation paper.

Table 1 Key sources of information relevant to this proposal

Item	Reference
The authority's decision on the new SRAM- November 2022	https://www.ea.govt.nz/documents/1402/SRAM_Decision_Paper.pdf
Letter from the Commerce Commission to the Authority	https://www.ea.govt.nz/documents/1400/ComCom_Response_to_EASRAM_under_Commerce_Act.pdf
Letter from the Authority to Transpower: Funding for new SRAM	https://www.ea.govt.nz/documents/1399/21_Dec_2022 Letter from EA to TP - Funding for SRAM.pdf

# 2. SRAM implementation cost recovery

2.1 This section outlines the Authority's proposal to enable Transpower to recover the costs associated with SRAM implementation from transmission customers.

#### Problem definition

- 2.2 Transpower has indicated that to calculate allocations for settlement residual rebates, it expects to incur implementation costs, including costs related to investigating and developing an automated IT system. As we have previously signalled in a letter to Transpower, we consider that Transpower should be compensated for the costs it efficiently incurs in implementing SRAM.<sup>2</sup>
- 2.3 In its submission on the SRAM Code amendment proposal, Transpower provided a preliminary estimate of \$1.15 million for investigating and developing an automated solution for SRAM implementation.
- 2.4 In a letter to the Authority dated 14 November 2022, the Commerce Commission informed the Authority that:<sup>3</sup>
  - (a) Transpower cannot be funded for carrying out SRAM allocations through the Commission's regulatory revenue-setting process (as administering the SRAM is not a regulated service under Part 4 of the Commerce Act 1986. This is because the Commission considers that administering the SRAM does not fall within the meaning of electricity lines services in section 54C of the Commerce Act 1986).
  - (b) Any revenue received by Transpower or by distributors for administering the SRAM would be unregulated revenue under Part 4 of the Commerce Act 1986.
- 2.5 It follows that Transpower cannot be reimbursed for such costs through the Part 4 regime.
- 2.6 The problem the Authority seeks to address now is how to ensure that Transpower is able to recover efficiently incurred costs of implementing the new SRAM. As part of this we need to consider how the portion of costs to be recovered from each designated transmission customer should be calculated.

#### Q1. Do you have any comments on the problem definition in this chapter?

#### Proposed solution

2.1 The Authority considers that the best way to ensure that Transpower can recover the efficiently incurred costs of SRAM implementation is to amend the benchmark agreement to provide for this.<sup>4</sup>

2.2 The Authority proposes to amend the benchmark agreement to include default terms and conditions providing for recovery by Transpower of settlement residue implementation and administration costs. These new terms would replace existing default terms and conditions providing for the payment of settlement residue (loss and constraint excess), which are no longer needed (as the Code now sets out how settlement residue must be paid).

<sup>2 21</sup> Dec 2022 Letter from EA to TP - Funding for SRAM.pdf

https://www.ea.govt.nz/documents/1400/ComCom\_Response\_to\_EA - SRAM\_under\_Commerce\_Act.pdf

The Authority will seek assurance that SRAM implementation costs are efficient (or are expected to be efficient), by requiring Transpower to get an independent technical and legal review of the costs, once the timelines and work are defined.

- 2.3 The Authority also proposes to amend the Code to deem these new default terms and conditions (providing for cost recovery) to be included in all current transmission agreements (including certain pre-2008 agreements that are not based on the benchmark agreement (ie, those referred to in clause 12.49 of the Code)).
- 2.4 This proposed approach allows for cost recovery in a cost-effective and transparent manner.

#### Benchmark agreement

- 2.5 The Electricity Industry Act 2010 (Act) includes a power for the Authority to include in the Code provisions that require Transpower and industry participants to enter into one or more agreements for connection to, use of, and (where relevant) investment in, the national grid (transmission agreements).<sup>5</sup>
- 2.6 The Act also provides that the Authority may prescribe in the Code default terms and conditions that are deemed to be included in these transmission agreements.
- 2.7 A transmission agreement is binding on both parties and enforceable as if it were a contract between the parties that had been freely and voluntarily entered into.
- 2.8 If the parties do not comply with a requirement in the Code to enter into one or more transmission agreements, the default terms and conditions in the Code are binding on both parties and enforceable as if they were set out in a transmission agreement.
- 2.9 These provisions in the Act provide an important regulatory lever which the Authority can use to further its main statutory objective, which is to promote competition in, reliable supply by, and the efficient operation of, the electricity industry for the long-term benefit of consumers by regulating the contractual relationship between these parties to further this objective.
- 2.10 The current Code does include a provision requiring Transpower and certain industry participants (designated transmission customers) to enter into transmission agreements.<sup>6</sup>
- 2.11 To date, the way in which terms and conditions have been deemed to be included in transmission agreements is by way of the "benchmark agreement".
- 2.12 The benchmark agreement is a template transmission agreement containing default terms and conditions. It is a document incorporated by reference into the Code.
- 2.13 Transmission agreements must be consistent in all material respects with the benchmark agreement at the time at which they are entered into.<sup>7</sup> The benchmark agreement also acts as a default transmission agreement if the parties fail to enter into a transmission agreement.<sup>8</sup>

#### Changes to Part D of the benchmark agreement

2.14 The Authority consider that the best way to ensure that Transpower can recover the (efficient) costs of SRAM implementation is to amend the benchmark agreement to provide

<sup>5 &</sup>lt;u>www.legislation.govt.nz/act/public/2010/0116/latest/DLM263</u>4381.html

Refer to clause 12.8 <a href="https://www.ea.govt.nz/documents/2556/Code">www.ea.govt.nz/documents/2556/Code</a> - Part\_12 - Transport - 1 APRIL 2023 Incls 22 March 2023 Sch 12.4 AMENDME 6rl5cTv.pdf

Refer to clause 12.14 <u>www.ea.govt.nz/documents/2556/Code - Part 12 - Transport - 1\_APRIL\_2023\_Incls\_22\_March\_2023\_Sch\_12.4\_AMENDME\_6rl5cTv.pdf</u>

Refer to clause 12.10 <a href="https://www.ea.govt.nz/documents/2556/Code">https://www.ea.govt.nz/documents/2556/Code</a> - Part 12 - Transport - 1 APRIL 2023 Incls 22 March 2023 Sch 12.4 AMENDME 6rl5cTv.pdf

- for this. This proposed approach would allow for cost recovery in a cost-effective and transparent manner.
- 2.15 The payment of settlement residue is currently dealt with by Part D of the benchmark agreement. This part sets out the payment of loss and constraint excess payments (the previous name of settlement residue). As the payment of settlement residue is now prescribed elsewhere in the Code, the current provisions of Part D are no longer required.
- 2.16 The Authority proposes to replace current Part D with a new Part D providing that Transpower may recover its reasonable settlement residue administration costs.
- 2.17 If this amendment is made Transpower will be able to recover its costs from its customers through its future transmission agreements with customers based on the updated benchmark agreement. To enable recovery from parties to existing transmission agreements the Authority also proposes to deem the amendments to the benchmark agreement to be made to all existing transmission agreements (including those referred to in clause 12.49 of the Code).
- 2.18 Please refer to the marked-up version of Part D of the benchmark agreement published alongside this consultation paper for the full details of the proposed amendment.

#### Calculating the portion of the administrative charge payable by each customer

- 2.19 The Authority's proposed approach requires the portion of costs recovered from each customer to be proportional to the settlement residue each transmission customer receives. This means that those who receive a relatively large settlement residual rebate will be required to pay a proportionately large share of the administrative charge.
- 2.20 The Authority expects that Transpower would recover costs over a sufficiently long period to avoid unduly high or low administrative charges driven by one-off events falling on customers. A pragmatic approach would be to recover the costs over 12 months by Transpower deducting one twelfth of the total SRAM implementation cost from the overall settlement residue before allocating it to customers. The difference between allocations before and after deducting SRAM implementation costs is the administrative charge paid by each customer (proportional to the settlement residue each customer receives).

#### Effect on existing transmission agreements

- 2.21 Amending the benchmark agreement would only provide for the recovery of settlement residue administration costs under future transmission agreements negotiated between Transpower and its customers.
- 2.22 To enable the equitable recovery of costs from all relevant transmission customers' existing transmission agreements, as well as certain "pre-2008" agreements (existing agreements), these agreements would need to be amended to include equivalent provisions to those being proposed for inclusion in the benchmark agreement.
- 2.23 Rather than requiring individual amendments to each of these agreements, the Authority considers that the simplest way of achieving its objective is to use its power under section 44 of the Act to amend the Code to deem the same provisions relating to the recovery of settlement residue recovery costs to be included in all existing agreements from the date the amendment comes into force.

The Authority will take steps (eg audit) to assure itself that implementation costs are expected to be efficient.

If required, the costs may include a cost for the time value of money. Where relevant, the Authority expects Transpower to apply rules consistent with approaches adopted in Part 4 of the Commerce Act.

2.24 Please refer to the marked-up version of the Code published alongside this consultation paper for the full details of the amendments.

#### Negative settlement residue

- 2.25 Settlement residue can be negative, either from corrections of previous overpayments or, in relatively rare cases, as a result of the SPD model generating negative LCE in specific grid scenarios.<sup>11</sup>
- 2.26 There are two ways that Transpower could charge such negative rebates to their respective customers:
  - (a) reducing future rebates (i.e., applying the negative rebate against the rebate amount for the following month).
  - (b) invoicing the customer (i.e., requiring payment of the negative amount).
- 2.27 Part D of the benchmark agreement has been updated to reflect this.
- 2.28 Distributors are not required to pass through negative settlement residue to their customers (as the pass-through requirement only applies to settlement residue that distributors are "paid"), so the Code does not impose any obligations on distributors that they may be unable to fulfil. Distributors would be able to adjust payments of settlement residual rebates to account for previous overpayments or any previous under-recovery.

#### **Customer Impact**

- 2.30 To illustrate the implications of the proposal to allocate the administrative charge in proportion to SRAM, we have modelled the impact on customers. The modelling:
  - (a) uses the indicative residue payments under the SRAM that we published in support of our SRAM consultation paper.<sup>12</sup>
  - (b) assumes the total SRAM implementation related cost to be recovered through the administrative charge is \$1.15m (a preliminary estimate provided by Transpower).
- 2.31 The impact assessment allocates the administrative charge in proportion to the settlement residual rebates they would have received during 21/22 had the new SRAM applied then.
- 2.32 Refer to Appendix C for a table illustrating the indicative impact on each customer. 13

# Other options considered for SRAM funding and implementation

- 2.33 As an alternative to our proposed approach to include SRAM implementation costs recovery provisions in all transmission agreements, the Authority considered an alternative means of enabling Transpower to recover its costs by seeking to increase the levy on industry participants (and the associated appropriation) to cover these costs.
- 2.34 The Authority concluded that our proposed approach is a simpler means of enabling recovery of Transpower's implementation costs by effectively and appropriately targeting recovery of costs at those that benefit from the distribution of settlement residue through the mechanism of existing contractual relations.

This can occur where marginal losses are less than average losses (such as where transformers have some fixed losses and are lightly loaded). It can also occur very rarely on unconstrained transmission lines due to very specific loop conditions. See Appendix B of Loss and constraint excess payment: Method for determining customer share (transpower.co.nz). It is not uncommon for connection LCE to be negative, but has been less common for a customer's total allocation of LCE to be negative.

The modelling illustrates what the residue payments would have been had the new SRAM applied in 2021/22.

More details of this assessment are published on the Authority's website alongside this consultation paper.

- 2.35 In addition, the Authority explored an alternative method of allocating costs by implementing a fixed cost per transmission customer, instead of the proposed approach for calculating the administrative charge. However, this alternative option may result in additional costs to transmission customers in cases where a customer's settlement residual rebates are lower than the applied fixed costs.
- Q2. Do you have comments on our proposed funding of SRAM implementation?
- Q3. Do you have comments on the proposed amendments to the benchmark agreement and the Code?
- Q4. Do you have comments on anything else in this chapter?

# 3. Focused changes to benchmark agreement

- 3.1 The benchmark agreement needs updating for consistency with the new TPM and to make other minor changes to reflect other law changes. These changes are required to provide clarity and reduce uncertainty, ensuring the provisions in transmission agreements effectively reflect and support TPM implementation.
- 3.2 As part of its Future Security and Resilience (FSR) work programme<sup>14</sup>, the Authority is planning a further review of the benchmark agreement (Stage 2). Work on the broader review likely to commence in 2024. Changes in this phase are therefore restricted to the enabling of recovery of SRAM implementation costs, and these limited TPM related changes.
- 3.3 We also propose that these amendments will be deemed to be made to all existing transmission agreements, other than certain pre-2008 agreements referred to in clause 12.49 of the Code. This is to ensure the clarity provided by the updates to the benchmark agreement would also apply to transmission agreements already in place between Transpower and its customers.
- 3.4 We have not proposed applying these amendments to the pre-2008 agreements at this stage as the work required to assess whether these earlier agreements should be amended has not yet been conducted. This may be addressed in the Stage 2 review of the benchmark agreement. We note though that irrespective of the provisions of these agreements, the Act provides that every transmission agreement between Transpower and an industry participant is deemed to include a provision under which the industry participant agrees to pay Transpower any amounts that Transpower charges the industry participant in accordance with the TPM (section 44(4) of the Act) so amendments are for clarity, and are not required to give effect to charging in accordance with the TPM.

# **Proposed Amendments**

- 3.5 Appendix A lists the relevant clauses where changes have been made and the reasons for these changes.
- 3.6 The Authority is proposing including the benchmark agreement in the Code as a new Schedule and updating the underlying Code provisions to make it clear that amendments to the benchmark agreement will be deemed to be made to existing transmission agreements (unless the amendment provides otherwise).

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- 3.7 This would provide clarity about what happens to existing transmission agreements when the benchmark agreement is amended and that the regular requirements of the Act for Code amendments will apply to any such amendments.
- 3.8 We also propose renaming the benchmark agreement the default transmission agreement template to more simply reflect the nature and purpose of the agreement (ie, it prescribes the default terms and conditions deemed to be included in transmission agreements in accordance with section 44(2) of the Act).
- 3.9 Please refer to the marked-up version of the Code published alongside this consultation paper for the full details of the amendments.

Q5. Do you have comments on the proposed amendments to the benchmark agreement and the Code?

Q6. Do you have comments on anything else in this chapter?

#### Embedded Networks

4.1 This section outlines an issue that has arisen around the pass-through of settlement residual rebates with respect to embedded networks, and potential options to address it.

#### Problem definition

- 4.2 In November 2022 the Authority introduced requirements on distributors to pass through settlement residual rebates (which they will receive from May 2023 onwards) to their own customers. The obligation to pass through these rebates is on distributors that received such rebates from Transpower (i.e., are Transpower customers) (clause 12A.3(2) a distributor that is paid any amount of settlement residue under clause 14.35A(1)).
- 4.3 The definition of "distributor" in the Code includes not only the 29 grid-connected distributors; it also includes embedded networks (networks that are embedded in other distribution networks, instead of being directly connected to the grid). <sup>15</sup> Approximately 24,000 ICPs or 1% of installation control points (ICPs) in New Zealand are currently receiving distribution services provided by embedded networks. Most of these ICPs (18,000) receive services from 37 embedded network service providers. The number of ICPs served by these service providers ranges from (at the high end) 8,700 ICPs to (at the low end) a single ICP. <sup>16</sup> For a list of embedded network service providers refer to Appendix D.
- 4.4 The Code requirements on distributors to pass through settlement residual rebates to their customers do not apply to embedded networks. This is because embedded networks do not receive settlement residual rebates *from Transpower* (but would instead receive *from a distributor* any amount passed by distributors to them under cl 12A.3).<sup>17</sup> It follows that embedded networks may opt to retain the rebates they receive, instead of passing them on to their customers. This means that the Authority's intention in requiring pass-through (that

embedded network means a system of lines, substations, and other works, used primarily for the "conveyance of electricity, that—

a) is indirectly connected to the grid through 1 or more other networks; and

b) has 1 or more ICP identifiers recorded in the registry as being connected to it"

The Embedded Network Company serves 8,700 ICPs. New Zealand Retail Property Group Management and Mercury NZ both have a single ICP.

Embedded networks are likely not Transpower customers who will receive payments of settlement residue from Transpower due to the definition of embedded network. The embedded network definition provides that these networks are indirectly connected to the grid.

- transmission users ultimately receive the settlement residual rebates) may not be achieved where those users are on embedded networks.
- 4.5 Further, embedded networks compete with grid-connected distribution networks.

  Competition between distributors and embedded network service providers is likely, predominantly, to be in the form of competition *for* the market of distribution services to new ICPs. Competition for the market likely occurs at the time of a tender to serve new ICPs, and ultimately each ICP is only served by a single network.
- 4.6 The fact that embedded networks may opt to retain the rebates they receive would potentially give embedded networks a competitive advantage over grid-connected distribution networks. It could also potentially have consequences for efficiency (such as encouraging inefficient investment in embedded networks).
- 4.7 This potential distortion was not considered during SRAM development. It was raised by a stakeholder during Authority staff engagement on the settlement residual rebates pass-through guidance for electricity distributors in March April 2023.

#### Alternative options considered

- 4.8 We have considered the following alternative options with respect to this issue:
  - (a) no change embedded networks receive settlement residual rebates (in proportion to transmission charges), but do not have an obligation to pass these payments through to their customers (as they are not receiving their rebates directly from a grid owner)
  - (b) expanded pass-through change the Code to require all distributors *including* embedded networks to pass through settlement residual rebates to their customers
  - (c) exclude embedded networks change the Code to require that distributors must *not* pass through settlement residual rebates in respect of embedded networks (and would instead distribute all of the settlement residue they receive proportionally amongst their other customers).
- 4.9 We consider that the no change option potentially gives embedded networks a competitive advantage over grid-connected distribution networks. This may have negative consequences for competition and for the purpose of the SRAM amendment (to pay settlement residual rebates to customers in proportion to transmission costs). Under the status quo the objective of the SRAM amendment may not be achieved if embedded network service providers keep the rebates rather than passing them on to their customers. Further, the status quo may encourage inefficient investment in embedded networks.
- 4.10 We consider that both the "expanded pass-through" option and the "exclude embedded networks" option could avoid the competitive distortion and potential inefficient incentives to invest in embedded networks.
- 4.11 The "expanded pass-through option" could better promote the objectives of the SRAM reform, compared to the "exclude embedded networks" option. A well-designed SRAM offsets congestion costs and does not undermine grid use and investment signals. Over time, it is expected to lead to relatively lower electricity prices for consumers. However, as discussed in the January 2022 consultation paper on SRAM, this can only be achieved if generators, industrial consumers, and retailers or their customers receive the settlement residual rebates. It follows that if the "expanded pass-through option" is not pursued, some of these benefits of the SRAM may not be achieved. In particular, if embedded networks do not pass the settlement residual rebates on to the parties that they are passing on transmission charges to, those parties could be paying more than the cost of providing them with transmission services.

- 4.12 On the other hand, the "expanded pass-through option" would have higher administrative costs, compared to the "exclude embedded networks" option (including implementation, monitoring and compliance costs). Further, it is not yet clear how expanding the pass-through requirement to embedded networks would be implemented (considering, for example, that embedded networks do not pay transmission charges, which are used as the basis for distributors to allocate rebates amongst their customers). Further, pricing for embedded networks is not regulated, which potentially reduces the degree to which the "expanded pass-through option" could be effective in achieving pass-through to customers.
- 4.13 The Authority considers it is not yet in a position to propose a Code amendment to resolve this issue. We are seeking views from stakeholders to inform our consideration.
- Q2. Do you have comments on the options for addressing the embedded networks issue?
- Q3. Which option best promotes the Authority's statutory objective? Please provide your reasons.
- Q4. Would the "expanded pass-through option" be able to be implemented effectively and in a cost-effective manner?
- Q5. What costs would embedded network services providers expect to incur in implementing the "expanded pass-through option" (including any significant additional system or assurance related costs, if any)? Please quantify any significant costs.
- Q6. Do you have comments on anything else in this chapter?

## 5. Regulatory Statement for the proposed amendment

#### Objectives of the proposed amendment

5.1. The objective of the proposed benchmark agreement amendment and Code change is to ensure that Transpower can recover its costs for implementing the SRAM.

#### The proposed amendments

- 5.2. The Authority proposes three SRAM and TPM related changes to the Code and the benchmark agreement in this consultation paper:
  - (a) Proposal 1: Amend the benchmark agreement to replace default terms and conditions providing for the payment of settlement residue (loss and constraint excess) with default terms and conditions providing for recovery by Transpower of settlement residue implementation and administration costs. This amendment would also be deemed to be made to all existing transmission agreements.
  - (b) Proposal 2: Amend the benchmark agreement to make it consistent with new TPM and to reflect other minor law changes. This amendment would also be deemed to be made to all existing transmission agreements, other than certain pre-2008 agreements (referred to in clause 12.49 of the Code).

# The proposed amendment's benefits are expected to outweigh the costs

#### Proposal 1: SRAM implementation cost recovery

5.3. The Authority has assessed the benefits and costs of the proposed Code amendments against a counterfactual of no benchmark agreement and Code amendment to provide for the recovery of costs and considered whether there were any feasible alternative means of addressing the identified issues.

- 5.4. The Authority considers that the benefits of the proposed amendments outweigh the costs of making no amendment or choosing an alternative means of addressing any of the issues.
- 5.5. Not providing for SRAM implementation cost recovery in transmission agreements would mean either Transpower is not funded for implementing the SRAM, or that funding would need to be sought elsewhere, most likely through an increase to the levy on industry participants. Providing for cost recovery through existing contractual mechanisms between Transpower and the relevant participants provides in our view the simplest and most cost-effective way for Transpower to recover its implementation costs from the right people, and outweighs any minor costs to parties of needing to understand and operationalise a new contractual term.

#### Proposal 2: Focused changes to benchmark agreement

- 5.6. Changes to the benchmark agreement and existing transmission agreements based on it to provide consistency with the new TPM and to reflect other law changes in the past decade would provide clarity and reduce uncertainty. This benefit is in our view not outweighed by any costs.
- 5.7. There would be no requirement for existing transmission agreements to be amended to reflect the updates, rather the amendments would be deemed to be included in existing agreements. Parties to agreements may amend the agreements to reflect the changes if they wish, with an expected minimal cost to do so.

Q7. Do you agree the benefits of the proposed amendments outweigh the costs?

# The Authority has identified other means for addressing the objectives *Proposal 1: SRAM implementation cost recovery*

5.8. The Authority has considered whether there are readily available alternatives for funding the implementation of SRAM such as increasing the levy on industry participants (and associated appropriation) to cover these costs. The Authority concludes this option, though potentially viable, would not as cleanly and efficiently target those who benefit from SRAM as enabling this by simply providing for this through the existing mechanism of the contractual relationship between the relevant parties.

#### Proposal 2: Focused changes to benchmark agreement

5.9. We have not identified other means of addressing the objectives. We could choose to make these changes later, for example when undertaking the wider benchmark agreement review planned for 2024. Given the low cost of making these changes, we consider it appropriate to make the changes to align with new TPM now to create clarity.

Q8. Do you agree the proposed amendments are preferable to the other options? If you disagree, please explain your preferred option in terms consistent with the Authority's statutory objectives in section 15 of the Electricity Industry Act 2010.

#### The proposed amendment complies with section 32(1) of the Act

- 5.13. The Authority's main objective under section 15 of the Act is to promote competition in, reliable supply by, and efficient operation of, the electricity industry for the long-term benefit of consumers.
- 5.14. Section 32(1) of the Act provides that the Code may contain any provisions that are consistent with the objectives of the Authority and are necessary or desirable to promote any or all of the matters set out in the tables below.

Table 1: How proposed amendment 1 (SRAM implementation cost recovery) complies with s.32(1) of the Act

(a)	competition in the electricity industry	Not applicable
(b)	the reliable supply of electricity to consumers;	Not applicable
(c)	the efficient operation of the electricity industry;	The amendments would achieve that policy intent which itself the Authority determined was necessary or desirable to promote the efficient operation of the electricity industry.
(d)	the protection of the interests of domestic consumers and small business consumers in relation to the supply of electricity to those consumers;	Not applicable
(e)	the performance by the Authority of its functions;	This amendment supports the Authority's function of making and administering the Code (section 16(1)(b))
(f)	any other matter specifically referred to in this Act as a matter for inclusion in the Code.	Not applicable

Table 2: How proposed amendment 2 (Focused changes to benchmark agreement) complies with section 32(1) of the Act

(a)	competition in the electricity industry	Not applicable
(b)	the reliable supply of electricity to consumers;	Not applicable
(c)	the efficient operation of the electricity industry;	Would align with TPM and improves clarity
(d)	the protection of the interests of domestic consumers and small business consumers in relation to the supply of electricity to those consumers;	Not applicable
(e)	the performance by the Authority of its functions;	This amendment supports the Authority's function of making and administering the Code (section 16(1)(b))

(f) any other matter specifically referred to in this Act as a matter for inclusion in the Code.	Not applicable
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Q9. Do you agree the Authority's proposed amendments 1 and 2 comply with section 32(1) of the Act?

### The Authority has given regard to the Code amendment principles

5.15. When considering amendments to the Code, the Authority is required by its Consultation Charter to have regard to the following Code amendment principles, to the extent that the Authority considers that they are applicable. Table 2 (below) describes the Authority's regard for the Code amendment principles in the preparation of the proposal.

Table 3: Regard for Code amendment principles

Principle		Comment
1.	Lawful	The proposals are lawful and are consistent with the Authority's statutory objectives and with the empowering provisions of the Act.
2.	Provides clearly identified efficiency gains or addresses market or regulatory failure	The efficiency gains (qualitatively assessed) are set out in the evaluation of the costs and benefits discussed earlier in section 5 of this paper.
3.	Net benefits are quantified	We have only undertaken a qualitative assessment of net benefits.
4.	Preference for small-scale 'trial and error' options	Not applicable.  Principles 4 to 9 apply only if it is unclear which option is best (refer clause 2.5 of the Consultation Charter)
5.	Preference for greater competition	Not applicable Principles 4 to 9 apply only if it is unclear which option is best (refer clause 2.5 of the Consultation Charter)
6.	Preference for market solutions	Not applicable Principles 4 to 9 apply only if it is unclear which option is best (refer clause 2.5 of the Consultation Charter)
7.	Preference for flexibility to allow innovation	Not applicable Principles 4 to 9 apply only if it is unclear which option is best (refer clause 2.5 of the Consultation Charter)
8.	Preference for non- prescriptive options	Not applicable (but note proposal 3 imposes less additional regulation than the alternative considered)  Principles 4 to 9 apply only if it is unclear which option is best (refer clause 2.5 of the Consultation Charter)
9.	Risk reporting	Not applicable.  Principles 4 to 9 apply only if it is unclear which option is best (refer clause 2.5 of the Consultation Charter)

# Appendix A: Proposed amendments to benchmark agreement

In the table below we set out proposed amendments to the benchmark agreement to reflect the new TPM and other minor changes to reflect other law changes. These amendments are also proposed to be deemed to be made to all existing transmission agreements (other than those agreements not based on the benchmark agreement referred to in clause 12.49 of the Code).

#### Amendments to the benchmark agreement proposed in this consultation paper

Clause	Reason for change	
Updates to the benchmark aggreement to reflect the new TPM and minor changes to reflect law changes		
1.2	Minor change for clarification and removal of older legislation reference.	
2.1	Minor change for clarification and removal of older legislation reference.	
3.1	Changes to reflect Transpower is not party to the agreement as system operator.	
3.2	Detail added to distinguish from embedded network owners.	
4.1	Detail added to include those who are not on the default transmission agreements and removal of older legislation reference.	
4.2 (a)	Wording changed to reflect that the parties may subsequently amend the agreement.	
4.2 (b)	Expanded to cover all types of investment agreement and deletion of unnecessary words.	
4.2 (c)	Removal of older legislation reference.	
4.3	Removal of section as it is no longer applicable due to referencing older legislation.	
5. Glossary	Added to reflect current legislation.	
5. Glossary	Added to reflect current legislation.	
5. Glossary	Changed to reflect that this definition is referring to directly connected parties only.	
5. Glossary	Removal of older legislation reference.	
5. Glossary	Removal of older legislation reference.	
5. Glossary	Updated to include reference to the new Transmission Pricing Methodology.	
5. Glossary	Removal of older legislation reference.	
5. Glossary	Definition expanded to capture other types of body corporate.	
6	Removal of older legislation reference.	
7.1	Minor change for clarification.	
7.8	Minor change for clarification.	
7.9	Removal of older legislation reference.	
9.1	Minor change to reflect current legislation.	

Clause	Reason for change
9.2(a)	Additional detail to resolve issue of lack of visibility that is required to calculate charges (adjustments).
9.2(b)	Change to reflect a more efficient process and to cut any unnecessary steps.
9.2(c)	Expanded to clarify using the information to calculate the Customer's own charges is also authorised.
9.3	Minor change for clarification.
9.4	This is to clarify how clause 12.102B(7) of the Code, and any similar clauses in future, work with the estimation and wash-up provisions of the agreement.
10.1 (a)	Minor change for clarification.
10.1 (b)	Minor change for clarification.
10.3(b)	Updated to reflect the current process where this is done in the annual notice of charges, not in individually monthly invoices.
10.3(e)	Expanded to capture prudent discount recovery charges and cap recovery charges.
10(4)	Deletion to reflect new Transmission Pricing Methodology.
10(6)	Minor change for clarification.
10(8) (a)	Minor change for clarification.
10(8) (b)	Minor change for clarification.
15.1 (b)	Minor change for clarification.
16(a)	Deletion to reflect new Transmission Pricing Methodology.
16(b)	Deletion to reflect new Transmission Pricing Methodology.
19.1(b)	Removal of older legislation reference.
19.2(b)	Deletion/Updated to reflect new Transmission Pricing Methodology.
19.7	Minor change for clarification.
20.4	Update to reflect new legislation.
20.8	Update to reflect new legislation.
21(1)(b)	Minor change for clarification.
21(1)(c)	Removal of older legislation reference.
21.4(h)	Update to reflect new legislation.
21.5(h)	Update to reflect new legislation.
21.6(k)	Update to reflect new legislation.
22.1(b)	Update to reflect new legislation.
22 (2)(e)	Minor change for clarification.
23.3	Minor change for clarification.
25.1	Minor change for clarification.
27	Minor change for clarification.

Clause	Reason for change
30(1)	Minor change for clarification.
31.1(c)	Update to reflect new legislation.
35 Definitions	Minor change for clarification.
36.1	Update to reflect new legislation.
37.3(b)	Removal of older legislation reference.
37.4	Removal of older legislation reference.
37.5	Removal of older legislation reference.
38	Minor change for clarification.
38(b)	Removal of older legislation reference.
38(c)	Minor change for clarification.
39.4(b)	Minor change for clarification.
40.1	Removal of older legislation reference.
40.2(a)	Removal of older legislation reference.
40.2(d)(2)	Removal of older legislation reference.
40.2(e)	Minor change for clarification and removal of older legislation reference.
40.2(f)	Removal of older legislation reference.
40.3(a)	Removal of older legislation reference.
40.4	Removal of older legislation reference.
41.3	Minor change for clarification.
41.3(a)	Deletion to reflect new Transmission Pricing Methodology.
41.4	Minor change for clarification.
41.6	Deletion to reflect new Transmission Pricing Methodology.
41.7	Changes to reflect the new Transmission Pricing Methodology.
Updates to Part D of the benchmark agreement to provide for recovery of SRAM mplementation costs and negative settlement residue	
Part D	Updated to remove reference to old SRAM and to provide for recovery of SRAM implementation costs and negative settlement residue.
Update to the Connection C	Code
Schedule 8	Update to reflect new Transmission Pricing Methodology and other minor technical changes.
4.4(b)(1), Schedule 8	Update to make this clause workable as the new TPM does not contain Schedule F or the relevant terms.

Amendments also required to be included in transmission agreements not based on benchmark agreements (agreements referred to in clause 12.49 of the Code)

Clause	Reason for change	
Updates to Part D to be reflected in clause 12.49 agreements		
Part D	Updated to include Transpower's methodology for recovering costs associated with the implementation of SRAM.	

# Appendix B: Proposed amendments to the Code

In the table below we set out amendments to the Code to support the amendment of the benchmark agreement.

## Amendments to the Code proposed in this consultation paper

Clause	Reason for change
1.1 Definition of connection code	Amended to reflect that the connection code will no longer be a document incorporated by reference (it will be included in a Schedule of the Code).
1.1 Definitions of default transmission agreement, default transmission agreement template	Replacement of the benchmark agreement naming convention with default transmission agreement template (the default terms and conditions which must be included in transmission agreements in new Schedule 12.6) and default transmission agreement (the agreement once entered into).  Further amendments to make this change are not set out below but can be seen in the draft amendment.
1.1 Definition of submission expiry date	Consequential changes removing references to Code provisions that are deleted (12.6 and 12.32) as described below.
1.1 Definition of transmission agreement	Addition of reference to default transmission agreement for clarity.
12.4	Consequential changes to reflect the amendments set out below.
12.5 and 12.6	Deleted as redundant – there is no need to prescribe a structure for agreements.
12.10(1)	The terms of the default transmission agreement (other than those which are incomplete – i.e. those that need to be populated with details) now apply as soon as soon as a participant becomes a designated transmission customer (whereas this currently happens after 2 months).
12.16	Deleted as with the connection code being moved into a Schedule of the Code these provisions are redundant.
12.17	This amendment clarifies that compliance with the connection code is under the transmission agreement rather than under the Code.
12.25 and 12.26	Deleted as with the connection code being moved into a Schedule of the Code these provisions are redundant.
12.27 and 12.28	Deleted as with the benchmark agreement being moved into a Schedule of the Code (as the default transmission agreement template) these provisions are redundant.
	The normal Code amendment requirements of the Act will apply as well as the process requirements in new clause 12.51 (requirement to have regard to the purpose, principles, and content of default transmission agreement templates).

Clause	Reason for change
12.31	Amended to clarify that the default transmission agreement must include recovery of settlement residue processing costs and any negative settlement residue.
12.32 to 12.34	Deleted as with the benchmark agreement being moved into a Schedule of the Code (as the default transmission agreement template) these provisions are redundant.
	The normal Code amendment requirements of the Act will apply.
12.45	Amended for clarity (to reflect that Transpower may amend the referenced schedules).
12.49(1)	Provides that existing agreements may be overridden when clause 12.52 applies (see below).
12.50	Amended to remove certification requirements on Transpower and the obligation on the Authority to publish agreements, these being considered excessive process requirements that do not need to be prescribed in the Code.
12.51	New simplified provisions specifying the requirements for amendments to the default transmission agreement template (in addition to the usual Code amendment requirements which will apply with the template now being included as a Schedule in the Code).
12.52	This clause sets out what happens to existing transmission agreements that parties have entered into before an amendment to the default transmission agreement template in the Schedule to the Code comes into force, when that amendment comes into force.
	Existing transmission agreements and earlier pre-2008 agreements preserved under clause 12.49(1) (pre-2008 agreements) will be amended to reflect amendments to the default transmission agreement template, except where the amendment specifies otherwise.
	In terms of the transmission agreements, other that the pre-2008 agreements, this provision simply replicates the status quo in the current benchmark agreement as clause 4.3 (benchmark agreement reviews) but with out-of-date references to Ministerial involvement in benchmark agreement reviews being removed.
	Note: The only amendment the Authority is proposing to apply to pre- 2008 agreements at this stage is the amendments relating to the recovery of settlement residue processing costs and any negative settlement residue (the provisions in the replacement Part D of the benchmark agreement/default transmission agreement template).
14.35A(1)	This amendment clarifies that the requirement on Transpower to pay settlement residue to its customers is subject to anything contrary in transmission agreements. This is to clarify that settlement residue may be withheld to pay for settlement residue processing costs and any negative settlement residue owing by a customer.

# Appendix C: Customer impact (indicative)

Transmission customer         Estimated residue (s)         Administration charge (sharge (s)         Astimated residue net of administrative estiment of administrative charge (s)           Lines business         Aurora Energy         2,143,345         2.1%         23,908         2,119,437           Aurora Energy         1,365,945         1.3%         15,236         1,350,709           Buller Electricity         89,693         0.0%         1,000         86,892           Centralines         90,743         0.0%         1,010         88,792           Counties Power         772,030         0.7%         8,611         763,418           EA Networks         1,172,505         1,10         13,079         1,159,427           Eastland Network         440,968         0.4%         4,098         363,276           Horizon Energy Distribution         1419,457         0.4%         4,679         414,779           Mairipower New Zealand         1,629,224         1.0%         1,617,309         1,511,051           Mariborough Lines         875,167         0.9%         9,762         865,405           Network Tarman         1,551,815         1,5%         1,739         1,534,506           Network Wattaki         492,431         5,94         2,94	<u> </u>	• `	,		
Lines business         Alpine Energy         2,143,345         2.1%         23,908         2,119,437           Aurora Energy         1,365,945         1.3%         15,236         1,350,943           Bullier Electricity         88,693         0.1%         1,000         88,692           Centralines         90,743         0.1%         1,012         89,731           Counties Power         772,030         0.7%         8,611         763,418           EA Networks         1,172,505         1.1%         13,079         1,456,048           Eastland Network         440,968         0.4%         4,919         456,049           Electra         367,374         0.4%         4,079         414,779           Mairpower New Zealand         1,629,224         1.6%         4,679         414,779           Mariborough Lines         875,167         0.8%         9,762         865,405           Nelson Electricity         128,423         0.1%         1,432         126,990           Network Tasman         1,551,815         1.5%         17,309         1,534,506           Network Waitaki         492,431         0.5%         5,493         486,938           Orion New Zealand         3,305,886         5.0% </th <th>Transmission customer</th> <th>settlement</th> <th>charge</th> <th></th> <th>settlement residue net of administrative</th>	Transmission customer	settlement	charge		settlement residue net of administrative
Aurora Energy         1,365,945         1.3%         15,236         1,350,709           Buller Electricity         89,693         0.1%         1,000         88,692           Centralines         90,743         0.1%         1,012         89,731           Counties Power         772,030         0.7%         8,611         763,418           EA Networks         1,172,505         1.1%         13,079         1,159,427           Eastland Network         440,968         0.4%         4,919         436,049           Electra         367,374         0.4%         4,098         363,276           Horizon Energy Distribution         419,457         0.4%         4,079         414,779           Maripower New Zealand         1,629,224         1.6%         18,173         1,611,051           Mariborough Lines         875,167         0.8%         9,762         865,405           Nelson Electricity         128,423         0.1%         1,432         126,909           Network Waitaki         492,431         0.5%         5,493         486,938           Northpower         2,883,349         2.8%         32,162         2,851,188           Orion New Zealand         8,305,880         8.1%         92,648 <th>Lines business</th> <th></th> <th></th> <th></th> <th></th>	Lines business				
Buller Electricity         89,693         0.1%         1,000         88,692           Centralines         90,743         0.1%         1,012         89,731           Counties Power         772,030         0.7%         8,611         763,418           EA Networks         1,172,505         1.1%         13,079         1,159,427           Eastland Network         440,968         0.4%         4,919         436,049           Electra         367,374         0.4%         4,098         363,276           Horizon Energy Distribution         419,457         0.4%         4,679         414,779           Mairpower New Zealand         1,629,224         1.6%         18,173         1,611,051           Metwork Tasman         1,551,815         1.5%         17,309         1,534,506           Network Vaitaki         492,431         0.5%         5,493         486,938           Northpower         2,883,349         2.8%         32,162         2,851,188           Network Waitaki         492,431         0.5%         5,745         5,119,144           Powerco         5,176,888         5.0%         5,745         5,119,144           Powernet         1,432,687         1.4%         15,981	Alpine Energy	2,143,345	2.1%	23,908	2,119,437
Buller Electricity         89,693         0.1%         1,000         88,692           Centralines         90,743         0.1%         1,012         89,731           Counties Power         772,030         0.7%         8,611         763,418           EA Networks         1,172,505         1.1%         13,079         1,159,427           Eastland Network         440,968         0.4%         4,919         436,049           Electra         367,374         0.4%         4,679         414,779           Mainpower New Zealand         1,629,224         1.6%         18,173         1,611,051           Mariborough Lines         875,167         0.8%         9,762         865,405           Melwork Tasman         1,551,815         1.5%         17,309         1,534,506           Network Vaitaki         492,431         0.5%         5,493         486,938           Northpower         2,833,349         2.8%         32,162         2,851,188           Powerco         5,176,888         5.0%         5,745         5,119,144           Powernet         1,432,687         1.4%         15,931         1,416,707           Scarpower         58,404         0.1%         5,033         46,755     <	•		1.3%		
Counties Power         772,030         0.7%         8,611         763,418           EA Networks         1,172,505         1.1%         13,079         1,159,427           Eastland Network         440,988         0.4%         4,919         436,049           Electra         367,374         0.4%         4,919         436,049           Horizon Energy Distribution         419,457         0.4%         4,679         414,779           Mainpower New Zealand         1,629,224         1.6%         18,173         1,611,051           Marlborough Lines         875,167         0.8%         9,762         865,405           Nelson Electricity         128,423         0.1%         1,432         126,990           Network Tasman         1,551,815         1.5%         17,309         1,534,506           Network Waitaki         492,431         0.5%         5,493         486,938           Northpower         2,883,348         2.8%         32,162         2,851,188           Orion New Zealand         8,305,880         8.1%         92,646         8,213,234           Powerco         5,176,888         5.0%         57,745         5,119,144           Powertea         1,432,687         1.4%         15,981 </td <td></td> <td></td> <td>0.1%</td> <td>1,000</td> <td></td>			0.1%	1,000	
EA Networks         1,172,505         1.1%         13,079         1,159,427           Eastland Network         440,968         0.4%         4,919         436,049           Electra         367,374         0.4%         4,908         363,276           Horizon Energy Distribution         419,457         0.4%         4,679         414,779           Mainpower New Zealand         1,629,224         1.6%         18,173         1,611,051           Mariborough Lines         875,167         0.8%         9,762         865,405           Nelson Electricity         128,423         0.1%         1,432         126,990           Network Vairtaki         492,431         0.5%         5,493         486,938           Northopower         2,883,349         2.8%         32,162         2,851,188           Orion New Zealand         8,305,880         8.1%         92,646         8,213,234           Powerco         5,176,888         5.0%         57,745         5,119,144           Powerto         1,432,687         1.4%         15,981         1,416,707           Scanpower         58,404         0.1%         651         5,753           The Lines Company         270,989         0.3%         3,023	Centralines	90,743	0.1%	1,012	89,731
Eastland Network         440,968         0.4%         4,919         436,049           Electra         367,374         0.4%         4,098         363,276           Horizon Energy Distribution         419,457         0.4%         4,679         414,779           Mainpower New Zealand         1,629,224         1.6%         18,173         1,611,051           Melson Electricity         128,423         0.1%         1,432         126,990           Network Tasman         1,551,815         1.5%         17,309         1,534,506           Network Waitaki         492,431         0.5%         5,493         486,938           Northpower         2,883,349         2.8%         32,162         2,881,188           Orion New Zealand         8,305,880         8.1%         92,646         8,213,234           Powerco         5,176,888         5.0%         57,745         5,119,144           Powernet         1,432,687         1.4%         15,981         1,416,707           Scanpower         58,404         0.1%         651         57,753           The Lines Company         270,989         0.3%         3,023         267,966           Top Energy         451,218         0.4%         5,033         <	Counties Power	772,030	0.7%	8,611	763,418
Electra         367,374         0.4%         4,098         363,276           Horizon Energy Distribution         419,457         0.4%         4,679         414,779           Mainpower New Zealand         1,629,224         1.6%         18,173         1,611,051           Marlborough Lines         875,167         0.8%         9,762         865,405           Nelson Electricity         128,423         0.1%         1,432         126,990           Network Tasman         1,551,815         1.5%         17,393         1,486,386           Network Waitaki         492,431         0.5%         5,493         486,938           Northpower         2,883,349         2.8%         32,162         2,851,188           Orion New Zealand         8,305,880         8.1%         92,646         8,213,234           Powerco         5,176,888         5.0%         57,745         5,119,144           Powerto         5,176,888         5.0%         57,745         5,119,144           Powerto         5,176,888         5.0%         57,745         5,119,144           Powerto         5,176,888         5.0%         55,981         1,446,707           Scanpower         58,404         0.1%         651 <td< td=""><td>EA Networks</td><td>1,172,505</td><td>1.1%</td><td>13,079</td><td></td></td<>	EA Networks	1,172,505	1.1%	13,079	
Horizon Energy Distribution         419,457         0.4%         4,679         414,779           Mainpower New Zealand         1,629,224         1.6%         18,173         1,611,051           Mariborough Lines         875,167         0.8%         9,762         865,405           Nelson Electricity         128,423         0.1%         1,432         126,990           Network Tasman         1,551,815         1.5%         17,309         1,534,506           Network Waitaki         492,431         0.5%         5,493         3466,938           Northpower         2,883,349         2.8%         32,162         2,851,188           Orion New Zealand         8,305,880         8.1%         92,646         8,213,234           Powerco         5,176,888         5.0%         57,745         5,119,144           Powerto         5,176,888         5.0%         57,745         5,119,144           Powerto         5,176,888         5.0%         57,745         5,119,144           Powerto         5,176,888         5.0%         55,931         1,416,707           Scanpower         58,404         0.1%         651         57,753           The Lines Company         270,989         0.3%         3,023	Eastland Network	440,968	0.4%	4,919	436,049
Mainpower New Zealand         1,629,224         1.6%         18,173         1,611,051           Marlborough Lines         875,167         0.8%         9,762         865,405           Nelson Electricity         128,423         0.1%         1,432         126,990           Network Tasman         1,551,815         1.5%         17,309         1,534,506           Network Waitaki         492,431         0.5%         5,493         486,938           Northpower         2,883,349         2.8%         32,162         2,851,188           Orion New Zealand         8,305,880         8.1%         92,646         8,213,234           Powerco         5,176,888         5.0%         57,745         5,119,144           Poweroet         1,432,687         1.4%         15,981         1,416,707           Scanpower         58,404         0.1%         651         57,753           The Lines Company         270,989         0.3%         3,023         267,966           Top Energy         451,218         0.4%         5,033         446,185           Unison Networks         1,745,005         1.7%         19,464         1,725,541           Vector         18,503,700         17.9%         206,396 <t< td=""><td>Electra</td><td>367,374</td><td>0.4%</td><td>4,098</td><td>363,276</td></t<>	Electra	367,374	0.4%	4,098	363,276
Mariborough Lines         875,167         0.8%         9,762         865,405           Nelson Electricity         128,423         0.1%         1,432         126,990           Network Tasman         1,551,815         1.5%         17,309         1,534,506           Network Waitaki         492,431         0.5%         5,493         486,938           Northpower         2,883,349         2.8%         32,162         2,851,188           Orion New Zealand         8,305,880         8.1%         92,646         8,213,234           Powerco         5,176,888         5.0%         57,745         5,119,144           Powernet         1,432,687         1.4%         15,991         1,416,707           Scanpower         58,404         0.1%         651         57,753           The Lines Company         270,989         0.3%         3,023         267,966           Top Energy         451,218         0.4%         5,033         446,185           Unison Networks         1,745,005         1.7%         19,464         1,725,541           Vector         18,503,700         17.9%         206,396         18,297,303           Wellington Electricity Lines         2,165,104         2,1%         24,150	Horizon Energy Distribution	419,457	0.4%	4,679	414,779
Nelson Electricity         128,423         0.1%         1,432         126,990           Network Tasman         1,551,815         1.5%         17,309         1,534,506           Network Waitaki         492,431         0.5%         5,493         486,938           Northpower         2,883,349         2.8%         32,162         2,851,188           Orion New Zealand         8,305,880         8.1%         92,646         8,213,234           Powerco         5,176,888         5.0%         57,745         5,119,144           Powernet         1,432,687         1.4%         15,981         1,416,707           Scanpower         58,404         0.1%         651         57,753           The Lines Company         270,989         0.3%         3,023         267,966           Top Energy         451,218         0.4%         5,033         446,185           Unison Networks         1,745,005         1.7%         19,464         1,725,541           Vector         18,503,700         17.9%         206,396         18,297,303           Waipa Networks         52,807         0.5%         6,166         546,641           WEL Networks         1,145,207         1.1%         12,774         1,132,433<	Mainpower New Zealand	1,629,224	1.6%	18,173	1,611,051
Nelson Electricity         128,423         0.1%         1,432         126,990           Network Tasman         1,551,815         1.5%         17,309         1,534,506           Network Waitaki         492,431         0.5%         5,493         486,938           Northpower         2,883,349         2.8%         32,162         2,851,188           Orion New Zealand         8,305,880         8.1%         92,646         8,213,234           Powerco         5,176,888         5.0%         57,745         5,119,144           Powernet         1,432,687         1.4%         15,981         1,416,707           Scanpower         58,404         0.1%         651         57,753           The Lines Company         270,989         0.3%         3,023         267,966           Top Energy         451,218         0.4%         5,033         446,185           Unison Networks         1,745,005         1.7%         19,464         1,725,541           Vector         18,503,700         17.9%         206,396         18,297,303           Waipa Networks         1,145,207         1.1%         12,774         1,132,433           Wellington Electricity Lines         2,165,104         2.1%         24,150	Marlborough Lines	875,167	0.8%	9,762	865,405
Network Tasman         1,551,815         1.5%         17,309         1,534,506           Network Waitaki         492,431         0.5%         5,493         486,938           Northpower         2,883,349         2.8%         32,162         2,851,188           Orion New Zealand         8,305,880         8.1%         92,646         8,213,234           Powerco         5,176,888         5.0%         57,745         5,119,144           Powernet         1,432,687         1.4%         15,981         1,416,707           Scanpower         58,404         0.1%         651         57,753           The Lines Company         270,989         0.3%         3,023         267,966           Top Energy         451,218         0.4%         5,033         446,185           Unison Networks         1,745,005         1,7%         19,464         1,725,541           Vector         18,503,700         17,9%         206,396         18,297,303           Waipa Networks         552,807         0.5%         6,166         546,641           WEL Networks         1,145,207         1.1%         12,774         1,132,433           Wellington Electricity Lines         2,165,104         2.1%         24,150	Nelson Electricity	128,423	0.1%	1,432	
Northpower         2,883,349         2.8%         32,162         2,851,188           Orion New Zealand         8,305,880         8.1%         92,646         8,213,234           Powerco         5,176,888         5.0%         57,745         5,119,144           Powernet         1,432,687         1.4%         15,981         1,416,707           Scanpower         58,404         0.1%         651         57,753           The Lines Company         270,989         0.3%         3,023         267,966           Top Energy         451,218         0.4%         5,033         446,185           Unison Networks         1,745,005         1.7%         19,464         1,725,541           Vector         18,503,700         17.9%         206,396         18,297,303           Waipa Networks         552,807         0.5%         6,166         546,641           WEL Networks         1,145,207         1.1%         12,774         1,132,433           Wellington Electricity Lines         2,165,104         2.1%         24,150         2,140,953           Westpower         333,993         0.3%         3,725         330,267           Direct connect         50         59,367         0.1%         662 <td>•</td> <td>1,551,815</td> <td>1.5%</td> <td>17,309</td> <td>1,534,506</td>	•	1,551,815	1.5%	17,309	1,534,506
Northpower         2,883,349         2.8%         32,162         2,851,188           Orion New Zealand         8,305,880         8.1%         92,646         8,213,234           Powerco         5,176,888         5.0%         57,745         5,119,144           Powernet         1,432,687         1.4%         15,981         1,416,707           Scanpower         58,404         0.1%         651         57,753           The Lines Company         270,989         0.3%         3,023         267,966           Top Energy         451,218         0.4%         5,033         446,185           Unison Networks         1,745,005         1.7%         19,464         1,725,541           Vector         18,503,700         17.9%         206,396         18,297,303           Walpa Networks         552,807         0.5%         6,166         546,641           WEL Networks         1,145,207         1.1%         12,774         1,132,433           Wellington Electricity Lines         2,165,104         2.1%         24,150         2,140,953           Westpower         333,993         0.3%         3,725         330,267           Direct connect         5         52,96         608,629         58,705	Network Waitaki	492,431	0.5%	5,493	486,938
Orion New Zealand         8,305,880         8.1%         92,646         8,213,234           Powerco         5,176,888         5.0%         57,745         5,119,144           Powernet         1,432,687         1.4%         15,981         1,416,707           Scanpower         58,404         0.1%         651         57,753           The Lines Company         270,989         0.3%         3,023         267,966           Top Energy         451,218         0.4%         5,033         446,185           Unison Networks         1,745,005         1.7%         19,464         1,725,541           Vector         18,503,700         17.9%         206,396         18,297,303           Waipa Networks         552,807         0.5%         6,166         546,641           WEL Networks         1,145,207         1.1%         12,774         1,132,433           Wellington Electricity Lines         2,165,104         2.1%         24,150         2,140,953           Westpower         333,993         0.3%         3,725         330,267           Lines business total         54,564,352         52.9%         608,629         53,955,723           Direct connect         50,000         1,000         1,000	Northpower			32,162	
Powerco         5,176,888         5.0%         57,745         5,119,144           Powernet         1,432,687         1.4%         15,981         1,416,707           Scanpower         58,404         0.1%         651         57,753           The Lines Company         270,989         0.3%         3,023         267,966           Top Energy         451,218         0.4%         5,033         446,185           Unison Networks         1,745,005         1.7%         19,464         1,725,541           Vector         18,503,700         17.9%         206,396         18,297,303           Waipa Networks         552,807         0.5%         6,166         546,641           WEL Networks         1,145,207         1.1%         12,774         1,132,433           Wellington Electricity Lines         2,165,104         2.1%         24,150         2,140,953           Westpower         333,993         0.3%         3,725         330,267           Lines business total         54,564,352         52.9%         608,629         53,955,723           Direct connect           Beach Energy Resources NZ (Holdings)         59,367         0.1%         662         58,705           Daiken Southland </td <td></td> <td>8,305,880</td> <td>8.1%</td> <td>92,646</td> <td>8,213,234</td>		8,305,880	8.1%	92,646	8,213,234
Scanpower         58,404         0.1%         651         57,753           The Lines Company         270,989         0.3%         3,023         267,966           Top Energy         451,218         0.4%         5,033         446,185           Unison Networks         1,745,005         1.7%         19,464         1,725,541           Vector         18,503,700         17.9%         206,396         18,297,303           Waipa Networks         552,807         0.5%         6,166         546,641           WEL Networks         1,145,207         1.1%         12,774         1,132,433           Wellington Electricity Lines         2,165,104         2.1%         24,150         2,140,953           Westpower         333,993         0.3%         3,725         330,267           Lines business total         54,564,352         52.9%         608,629         53,955,723           Direct connect           Beach Energy Resources NZ (Holdings)         59,367         0.1%         662         58,705           Daiken Southland         117,741         0.1%         1,313         116,428           GTL Energy New Zealand         1,065         0.0%         480         42,573           Methanex N	Powerco	5,176,888	5.0%	57,745	
The Lines Company         270,989         0.3%         3,023         267,966           Top Energy         451,218         0.4%         5,033         446,185           Unison Networks         1,745,005         1.7%         19,464         1,725,541           Vector         18,503,700         17.9%         206,396         18,297,303           Waipa Networks         552,807         0.5%         6,166         546,641           WEL Networks         1,145,207         1.1%         12,774         1,132,433           Wellington Electricity Lines         2,165,104         2.1%         24,150         2,140,953           Westpower         333,993         0.3%         3,725         330,267           Lines business total         54,564,352         52.9%         608,629         53,955,723           Direct connect           Beach Energy Resources NZ (Holdings)         59,367         0.1%         662         58,705           Daiken Southland         117,741         0.1%         1,313         116,428           GTL Energy New Zealand         1,065         0.0%         12         1,053           KiwiRail Holdings         43,053         0.0%         480         42,573           Meth	Powernet	1,432,687	1.4%	15,981	1,416,707
Top Energy         451,218         0.4%         5,033         446,185           Unison Networks         1,745,005         1.7%         19,464         1,725,541           Vector         18,503,700         17.9%         206,396         18,297,303           Waipa Networks         552,807         0.5%         6,166         546,641           WEL Networks         1,145,207         1.1%         12,774         1,132,433           Wellington Electricity Lines         2,165,104         2.1%         24,150         2,140,953           Westpower         333,993         0.3%         3,725         330,267           Lines business total         54,564,352         52.9%         608,629         53,955,723           Direct connect           Beach Energy Resources NZ (Holdings)         59,367         0.1%         662         58,705           Daiken Southland         117,741         0.1%         1,313         116,428           GTL Energy New Zealand         1,065         0.0%         12         1,053           KiwiRail Holdings         43,053         0.0%         480         42,573           Methanex New Zealand         37,538         0.0%         419         37,119           New Z	Scanpower	58,404	0.1%	651	57,753
Unison Networks         1,745,005         1.7%         19,464         1,725,541           Vector         18,503,700         17.9%         206,396         18,297,303           Waipa Networks         552,807         0.5%         6,166         546,641           WEL Networks         1,145,207         1.1%         12,774         1,132,433           Wellington Electricity Lines         2,165,104         2.1%         24,150         2,140,953           Westpower         333,993         0.3%         3,725         330,267           Lines business total         54,564,352         52.9%         608,629         53,955,723           Direct connect           Beach Energy Resources NZ (Holdings)         59,367         0.1%         662         58,705           Daiken Southland         117,741         0.1%         1,313         116,428           GTL Energy New Zealand         1,065         0.0%         12         1,053           KiwiRail Holdings         43,053         0.0%         480         42,573           Methanex New Zealand         37,538         0.0%         419         37,119           New Zealand Steel         868,264         0.8%         9,685         858,579 <t< td=""><td>The Lines Company</td><td>270,989</td><td>0.3%</td><td>3,023</td><td>267,966</td></t<>	The Lines Company	270,989	0.3%	3,023	267,966
Vector         18,503,700         17.9%         206,396         18,297,303           Waipa Networks         552,807         0.5%         6,166         546,641           WEL Networks         1,145,207         1.1%         12,774         1,132,433           Wellington Electricity Lines         2,165,104         2.1%         24,150         2,140,953           Westpower         333,993         0.3%         3,725         330,267           Lines business total         54,564,352         52.9%         608,629         53,955,723           Direct connect           Beach Energy Resources NZ (Holdings)         59,367         0.1%         662         58,705           Daiken Southland         117,741         0.1%         1,313         116,428           GTL Energy New Zealand         1,065         0.0%         12         1,053           KiwiRail Holdings         43,053         0.0%         480         42,573           Methanex New Zealand         37,538         0.0%         419         37,119           New Zealand Steel         868,264         0.8%         9,685         858,579           Norske Skog Tasman         517,617         0.5%         5,774         511,843	Top Energy	451,218	0.4%	5,033	446,185
Waipa Networks         552,807         0.5%         6,166         546,641           WEL Networks         1,145,207         1.1%         12,774         1,132,433           Wellington Electricity Lines         2,165,104         2.1%         24,150         2,140,953           Westpower         333,993         0.3%         3,725         330,267           Lines business total         54,564,352         52.9%         608,629         53,955,723           Direct connect           Beach Energy Resources NZ (Holdings)         59,367         0.1%         662         58,705           Daiken Southland         117,741         0.1%         1,313         116,428           GTL Energy New Zealand         1,065         0.0%         12         1,053           KiwiRail Holdings         43,053         0.0%         480         42,573           Methanex New Zealand         37,538         0.0%         419         37,119           New Zealand Steel         868,264         0.8%         9,685         858,579           Norske Skog Tasman         517,617         0.5%         5,774         511,843           NZ Aluminium Smelters         4,668,054         4.5%         52,069         4,615,985	Unison Networks	1,745,005	1.7%	19,464	1,725,541
WEL Networks         1,145,207         1.1%         12,774         1,132,433           Wellington Electricity Lines         2,165,104         2.1%         24,150         2,140,953           Westpower         333,993         0.3%         3,725         330,267           Lines business total         54,564,352         52.9%         608,629         53,955,723           Direct connect           Beach Energy Resources NZ (Holdings)         59,367         0.1%         662         58,705           Daiken Southland         117,741         0.1%         1,313         116,428           GTL Energy New Zealand         1,065         0.0%         12         1,053           KiwiRail Holdings         43,053         0.0%         480         42,573           Methanex New Zealand         37,538         0.0%         419         37,119           New Zealand Steel         868,264         0.8%         9,685         858,579           Norske Skog Tasman         517,617         0.5%         5,774         511,843           NZ Aluminium Smelters         4,668,054         4.5%         52,069         4,615,985           OMV New Zealand Production         39,592         0.0%         442         39,151 </td <td>Vector</td> <td>18,503,700</td> <td>17.9%</td> <td>206,396</td> <td>18,297,303</td>	Vector	18,503,700	17.9%	206,396	18,297,303
Wellington Electricity Lines         2,165,104         2.1%         24,150         2,140,953           Westpower         333,993         0.3%         3,725         330,267           Lines business total         54,564,352         52.9%         608,629         53,955,723           Direct connect           Beach Energy Resources NZ (Holdings)         59,367         0.1%         662         58,705           Daiken Southland         117,741         0.1%         1,313         116,428           GTL Energy New Zealand         1,065         0.0%         12         1,053           KiwiRail Holdings         43,053         0.0%         480         42,573           Methanex New Zealand         37,538         0.0%         419         37,119           New Zealand Steel         868,264         0.8%         9,685         858,579           Norske Skog Tasman         517,617         0.5%         5,774         511,843           NZ Aluminium Smelters         4,668,054         4.5%         52,069         4,615,985           OMV New Zealand Production         39,592         0.0%         442         39,151	Waipa Networks	552,807	0.5%	6,166	546,641
Wellington Electricity Lines         2,165,104         2.1%         24,150         2,140,953           Westpower         333,993         0.3%         3,725         330,267           Lines business total         54,564,352         52.9%         608,629         53,955,723           Direct connect           Beach Energy Resources NZ (Holdings)         59,367         0.1%         662         58,705           Daiken Southland         117,741         0.1%         1,313         116,428           GTL Energy New Zealand         1,065         0.0%         12         1,053           KiwiRail Holdings         43,053         0.0%         480         42,573           Methanex New Zealand         37,538         0.0%         419         37,119           New Zealand Steel         868,264         0.8%         9,685         858,579           Norske Skog Tasman         517,617         0.5%         5,774         511,843           NZ Aluminium Smelters         4,668,054         4.5%         52,069         4,615,985           OMV New Zealand Production         39,592         0.0%         442         39,151	WEL Networks	1,145,207	1.1%	12,774	1,132,433
Westpower         333,993         0.3%         3,725         330,267           Lines business total         54,564,352         52.9%         608,629         53,955,723           Direct connect           Beach Energy Resources NZ (Holdings)         59,367         0.1%         662         58,705           Daiken Southland         117,741         0.1%         1,313         116,428           GTL Energy New Zealand         1,065         0.0%         12         1,053           KiwiRail Holdings         43,053         0.0%         480         42,573           Methanex New Zealand         37,538         0.0%         419         37,119           New Zealand Steel         868,264         0.8%         9,685         858,579           Norske Skog Tasman         517,617         0.5%         5,774         511,843           NZ Aluminium Smelters         4,668,054         4.5%         52,069         4,615,985           OMV New Zealand Production         39,592         0.0%         442         39,151	Wellington Electricity Lines		2.1%	24,150	
Lines business total         54,564,352         52.9%         608,629         53,955,723           Direct connect           Beach Energy Resources NZ (Holdings)         59,367         0.1%         662         58,705           Daiken Southland         117,741         0.1%         1,313         116,428           GTL Energy New Zealand         1,065         0.0%         12         1,053           KiwiRail Holdings         43,053         0.0%         480         42,573           Methanex New Zealand         37,538         0.0%         419         37,119           New Zealand Steel         868,264         0.8%         9,685         858,579           Norske Skog Tasman         517,617         0.5%         5,774         511,843           NZ Aluminium Smelters         4,668,054         4.5%         52,069         4,615,985           OMV New Zealand Production         39,592         0.0%         442         39,151	·				330,267
Direct connect         Beach Energy Resources NZ (Holdings)       59,367       0.1%       662       58,705         Daiken Southland       117,741       0.1%       1,313       116,428         GTL Energy New Zealand       1,065       0.0%       12       1,053         KiwiRail Holdings       43,053       0.0%       480       42,573         Methanex New Zealand       37,538       0.0%       419       37,119         New Zealand Steel       868,264       0.8%       9,685       858,579         Norske Skog Tasman       517,617       0.5%       5,774       511,843         NZ Aluminium Smelters       4,668,054       4.5%       52,069       4,615,985         OMV New Zealand Production       39,592       0.0%       442       39,151	Lines business total	54,564,352	52.9%	608,629	53,955,723
Beach Energy Resources NZ (Holdings)       59,367       0.1%       662       58,705         Daiken Southland       117,741       0.1%       1,313       116,428         GTL Energy New Zealand       1,065       0.0%       12       1,053         KiwiRail Holdings       43,053       0.0%       480       42,573         Methanex New Zealand       37,538       0.0%       419       37,119         New Zealand Steel       868,264       0.8%       9,685       858,579         Norske Skog Tasman       517,617       0.5%       5,774       511,843         NZ Aluminium Smelters       4,668,054       4.5%       52,069       4,615,985         OMV New Zealand Production       39,592       0.0%       442       39,151	Direct connect				
GTL Energy New Zealand       1,065       0.0%       12       1,053         KiwiRail Holdings       43,053       0.0%       480       42,573         Methanex New Zealand       37,538       0.0%       419       37,119         New Zealand Steel       868,264       0.8%       9,685       858,579         Norske Skog Tasman       517,617       0.5%       5,774       511,843         NZ Aluminium Smelters       4,668,054       4.5%       52,069       4,615,985         OMV New Zealand Production       39,592       0.0%       442       39,151		59,367	0.1%	662	58,705
GTL Energy New Zealand       1,065       0.0%       12       1,053         KiwiRail Holdings       43,053       0.0%       480       42,573         Methanex New Zealand       37,538       0.0%       419       37,119         New Zealand Steel       868,264       0.8%       9,685       858,579         Norske Skog Tasman       517,617       0.5%       5,774       511,843         NZ Aluminium Smelters       4,668,054       4.5%       52,069       4,615,985         OMV New Zealand Production       39,592       0.0%       442       39,151	Daiken Southland	117,741	0.1%	1,313	116,428
KiwiRail Holdings       43,053       0.0%       480       42,573         Methanex New Zealand       37,538       0.0%       419       37,119         New Zealand Steel       868,264       0.8%       9,685       858,579         Norske Skog Tasman       517,617       0.5%       5,774       511,843         NZ Aluminium Smelters       4,668,054       4.5%       52,069       4,615,985         OMV New Zealand Production       39,592       0.0%       442       39,151	GTL Energy New Zealand	1,065	0.0%		
Methanex New Zealand       37,538       0.0%       419       37,119         New Zealand Steel       868,264       0.8%       9,685       858,579         Norske Skog Tasman       517,617       0.5%       5,774       511,843         NZ Aluminium Smelters       4,668,054       4.5%       52,069       4,615,985         OMV New Zealand Production       39,592       0.0%       442       39,151	•	43,053	0.0%	480	
New Zealand Steel         868,264         0.8%         9,685         858,579           Norske Skog Tasman         517,617         0.5%         5,774         511,843           NZ Aluminium Smelters         4,668,054         4.5%         52,069         4,615,985           OMV New Zealand Production         39,592         0.0%         442         39,151	· ·				
Norske Skog Tasman       517,617       0.5%       5,774       511,843         NZ Aluminium Smelters       4,668,054       4.5%       52,069       4,615,985         OMV New Zealand Production       39,592       0.0%       442       39,151					
NZ Aluminium Smelters       4,668,054       4.5%       52,069       4,615,985         OMV New Zealand Production       39,592       0.0%       442       39,151					
OMV New Zealand Production 39,592 0.0% 442 39,151	-				

Transmission customer	Estimated settlement residue (\$)	Administration charge allocator (%)	Administrative charge (\$)	Estimated settlement residue net of administrative charge (\$)
Southpark Utilities	895	0.0%	10	886
Whareroa Cogeneration	35,401	0.0%	395	35,006
Winstone Pulp International	283,117	0.3%	3,158	279,959
Direct connect total	7,278,246	7.1%	81,184	7,197,062
Generator				
Contact Energy	6,373,181	6.2%	71,089	6,302,092
Genesis Energy	6,581,661	6.4%	73,414	6,508,247
Kawerau Geothermal	200,585	0.2%	2,237	198,348
Manawa	167,124	0.2%	1,864	165,260
MEL (Te Apiti)	52,965	0.1%	591	52,374
MEL (West Wind)	84,291	0.1%	940	83,350
Mercury NZ	2,870,490	2.8%	32,018	2,838,472
Mercury SPV	494,526	0.5%	5,516	489,010
Meridian Energy	21,774,449	21.1%	242,879	21,531,570
Nga Awa Purua Joint Venture	1,062,178	1.0%	11,848	1,050,330
Ngatamariki Geothermal	653,769	0.6%	7,292	646,476
Nova Energy	32,689	0.0%	365	32,324
Southdown Cogeneration	3,771	0.0%	42	3,729
Southern Generation GP	23,447	0.0%	262	23,186
Tararua Wind Power	374,142	0.4%	4,173	369,968
Todd Generation Taranaki	210,885	0.2%	2,352	208,533
Waverley Wind Farm	296,270	0.3%	3,305	292,965
Generator total	41,256,423	40%	460,188	40,796,235
Total	103,099,020	100%	1,150,000	101,949,020

Notes: For further information refer to paragraphs 2.30 to 2.31 and the workbook published alongside this consultation paper.

# Appendix D: List of embedded network service providers

	Number of ICPs
Non-EDB service providers	0.700
The Embedded Network Company Smart Net	8,700
	1,610 953
Scentre Group	
Oyster Networks EDC Ltd	897
	799
Kiwi Income Properties Trust	661
Tuihana Networks	583 547
Auckland International Airport	547 514
Precinct Properties Dominion Funds	480
Robt Jones	460 347
Mountain Power	343
Embedded Network Services	330
PSPIB Waiheke	248
CB Richard Ellis	193
New Zealand Airways	193
•	133
Body Corporate (Merchant Quarter)	80
Body Corporate (Elevate) Body Corporate (Brickworks Apartments)	73
Body Corporate (The Pines)	73 53
Sabina	53 41
	41
TrustPower (Waipori) Smales Farm	38
Waikanae ENE	30 31
Caniwi Properties	26
22 Stoddard Road Ltd	24
Viewmount Orchards	22
Westpac	18
The National Property Trust	17
Viaduct New Zealand	15
Tuaropaki Kaitiaki	11
Christchurch International Airport	10
New Zealand Steel	3
NZ Aluminium Smelters	3
TrustPower	3
Norske Skog Tasman	2
New Zealand Retail Property Group Management	1
Mercury NZ	1
Total number of ICPs supplied by non-EDB service providers	•
EDB service providers	18,022
Lakeland Network (OtagoNet)	4,114
WEL Networks	1,904
Aurora Energy	140
Waipa Networks	66
EA Networks	13
Orion NZ	2
Top Energy	2
Total number of ICPs supplied by EDB service providers	6,241
. S.a	0,271

Source: EMI (non-EDB service providers and Lakeland Network; accessed on 31 March 2023) and Part 4 information disclosures (EDB service providers other than Lakeland Network; 2022 disclosures).

# Appendix E: Questions to assist submitters.

- E.1 You are welcome to comment on any matter relevant to the Authority's proposal.
- E.2 We have posed questions throughout the consultation paper to help prompt responses to specific aspects of the proposal. These are repeated here.
- E.3 Please do not feel that you need to limit your responses to the consultation questions or that you need to answer them all. Please explain your answers in terms consistent with the Authority's statutory objective in section 15 of the Electricity Industry Act 2010.

	Questions
Chapter 2	Do you have any comments on the problem definition in this chapter?
	Do you have comments on our proposed funding of SRAM implementation?
	Do you have comments on the proposed amendments to the benchmark agreement and the Code?
	Do you have comments on anything else in this chapter?
Response	
Chapter 3	Do you have comments on the proposed amendments to the benchmark agreement and the Code?
	Do you have comments on anything else in this chapter?
Response	
Chapter 4	Do you have comments on the options for addressing the embedded
	networks issue?  Which option best promotes the Authority's statutory objective? Please provide your reasons.
	What costs would embedded network services providers expect to incur in implementing the "expanded pass-through option" (including any significant additional system or assurance-related costs, if any)? Please quantify any significant costs.
	Would the "expanded pass-through option" be able to be implemented effective and in a cost-effective manner?

Do you have comments on anything else in this chapter?

Response

#### Chapter 5

Do you agree the benefits of the proposed amendments outweigh the costs?

Do you agree the proposed amendments are preferable to the other options? If you disagree, please explain your preferred option in terms consistent with the Authority's statutory objectives in section 15 of the Electricity Industry Act 2010.

Do you agree the Authority's proposed amendments 1 and 2 comply with section 32(1) of the Act?

#### Response