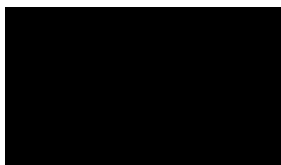


Cost of capital determination for electricity distribution businesses' default price-quality path commencing 2025 and Transpower New Zealand Limited's 2025-2030 individual price-quality path

[2024] NZCC 21

The Commission: Vhari McWha
 Bryan Chapple
 Dr Derek Johnston
 Nathan Strong

Date of decision: 25 September 2024



Vhari McWha, Commissioner

Dated at Wellington this 25th day of September 2024

COMMERCE COMMISSION

Wellington, New Zealand

Associated documents

Publication date	Reference	Title
1 August 2024	ISSN 1178-2560	Cost of capital determination for disclosure year 2025 for information disclosure regulation - For Transpower, gas distribution businesses and suppliers of specified airport services (with a June year-end) [2024] NZCC 15
27 June 2024	ISBN 978-1-869457-90-7	Guidelines for WACC determinations under the cost of capital input methodologies - Regulation under Part 4 of the Commerce Act 1986 and Part 6 of the Telecommunications Act 2001 (Post-IM review version)
1 May 2024	ISSN 1178-2560	Cost of capital determination for disclosure year 2025 for information disclosure regulation – Electricity distribution businesses and Wellington International Airport [2024] NZCC 7
13 December 2023	ISBN 978-1-991085-69-6	Cost of capital topic paper, Part 4 Input Methodologies Review 2023 – Final decision
1 August 2023	ISSN 1178-2560	Cost of capital determination for disclosure year 2024 for information disclosure regulation - For Transpower, gas distribution businesses and suppliers of specified airport services (with a June year-end) [2023] NZCC 20
1 May 2023	ISSN 1178-2560	Cost of capital determination for disclosure year 2024 for information disclosure regulation – Electricity distribution businesses and Wellington International Airport [2023] NZCC 8
17 January 2023	ISBN 978-1-869457-90-7	Guidelines for WACC determinations under the cost of capital input methodologies – Regulation under Part 4 of the Commerce Act 1986 and Part 6 of the Telecommunications Act 2001
2 August 2022	ISSN 1178-2560	Cost of capital determination for disclosure year 2023 for information disclosure regulation – For Transpower, gas pipeline businesses and suppliers of specified airport services (with a June year-end) [2022] NZCC 28
3 May 2022	ISSN 1178-2560	Cost of capital determination for disclosure year 2023 for information disclosure regulation – For Electricity distribution businesses and Wellington International Airport [2022] NZCC 12

2 August 2021	ISSN 1178-2560	Cost of capital determination for disclosure year 2023 for information disclosure regulation– For Transpower, gas pipeline businesses and suppliers of specified airport services (with a June year-end)
30 April 2021	ISSN 1178-2560	Cost of capital determination for disclosure year 2022 – Electricity distribution businesses and Wellington International Airport [2021] NZCC 4
31 July 2020	ISSN 1178-2560	Cost of capital determination for disclosure year 2021 – For Transpower, gas pipeline businesses and suppliers of specified airport services (with a June year-end) [2020] NZCC 15
13 May 2020	ISSN 1178-2560	Cost of capital determination for disclosure year 2021 – Electricity distribution businesses and Wellington International Airport [2020] NZCC 11
25 September 2019	ISSN 1178-2560	Cost of capital determination for electricity distribution businesses' 2020-2025 default price-quality paths and Transpower New Zealand Limited's 2020-2025 individual price-quality path [2019] NZCC 12
28 September 2012	ISBN 978-1-869452-16-2	Electricity Distribution Services Input Methodologies Determination 2012 [2012] NZCC 26, as amended

Commerce Commission
Wellington, New Zealand

WACC estimates for 2025 EDB DPP and 2025 Transpower IPP

1. This determination specifies the weighted average cost of capital (WACC) estimates that will apply to:
 - 1.1 the default price-quality path (DPP) for electricity distribution businesses (EDBs) that are not exempt from default/customised price-quality regulation under s 54G of the Commerce Act 1986 for the regulatory period commencing on 1 April 2025 (DPP4); and
 - 1.2 Transpower New Zealand Limited's (Transpower) individual price-quality path (IPP) for the regulatory period commencing on 1 April 2025 (RCP4).
2. This cost of capital determination has been made under the cost of capital Input Methodologies (IMs) that apply to EDBs and Transpower.¹
3. Vanilla and post-tax WACC estimates for the EDB DPP and Transpower IPP regulatory periods commencing in April 2025 are summarised in Table 1 below.

Table 1: Summary of vanilla and post-tax WACC estimates for EDBs and Transpower

	Vanilla WACC	Post-tax WACC
Mid-point	6.68%	6.02%
65 th percentile	7.10%	6.44%

4. The WACC estimates have been calculated as at 2 September 2024, which is the first business day of the month 7 months prior to the start of the next DPP regulatory period.
5. This determination should be read together with our guidelines for WACC determinations under the cost of capital input methodologies.² These guidelines form part of this determination. The guidelines explain our methodology for calculating WACC estimates, including:
 - 5.1 the formulas used (including for different WACC percentiles);
 - 5.2 the values for WACC parameters which are fixed under the IMs; and
 - 5.3 our methodology for determining the risk-free rate and average debt premium.

¹ Electricity Distribution Services Input Methodologies Determination 2012 [2012] NZCC 26 (as amended); Transpower Input Methodologies Determination [2012] NZCC 17 (as amended).

² Commerce Commission, [Guidelines for WACC determinations under the cost of capital input methodologies \(post-IM review version\)](#) (27 June 2024).

6. The Part 4 IM Review 2023 resulted in changes to some fixed WACC parameters, including leverage, asset beta and equity beta. For EDBs and Transpower, these new parameters apply for a DPP or IPP which commences on or after 1 April 2025.³

Further details regarding the WACC estimates

WACC parameter values for 2025 EDB DPP and 2025-2030 Transpower IPP

7. The parameter values used to generate the mid-point WACC estimates for the EDB DPP and Transpower IPP regulatory periods commencing on 1 April 2025 are summarised in Table 2 below.

Table 2: Values used to calculate WACC estimates for EDB DPP and Transpower IPP *

Parameter	EDB and Transpower
Risk-free rate	4.26%
Average debt premium	1.28%
Leverage	41%
Asset beta	0.36
Equity beta	0.61
Tax adjusted market risk premium	7.0%
Average corporate tax rate	28%
Average investor tax rate	28%
Debt issuance costs	0.20%
Cost of debt	5.74%
Cost of equity	7.34%
Standard error of midpoint WACC estimate	0.0108
Mid-point vanilla WACC	6.68%
Mid-point post-tax WACC	6.02%

*The numbers are rounded to two decimal points, except for tax adjusted market risk premium and standard error of the mid-point WACC estimate, for which the values are taken as they are stated in the IMs.

³ [Electricity Distribution Services Input Methodologies \(IM Review 2023\) Amendment Determination 2023 \[2023\] NZCC 35](#) (December 2023), clause 4(b)(iii); [Transpower Input Methodologies \(IM Review 2023\) Amendment Determination 2023 \[2023\] NZCC 38](#) (December 2023), clause 4(c).

Risk-free rate for EDBs and Transpower

8. The risk-free rate reflects the estimated bid yield to maturity on New Zealand government bonds with a term to maturity equal to the length of the regulatory period.
9. Our estimate of the five-year risk-free rate is based on data reported by Bloomberg for the three-month period ending 31 August 2024 in respect of the April 2029 and May 2030 maturity bonds.
10. The daily data reported by Bloomberg is linearly interpolated, annualised (to reflect the six-monthly payment of interest) and averaged to produce the estimate of a 4.26% interest rate on New Zealand government bonds with a five-year term to maturity, as estimated at 2 September 2024.⁴

Average debt premium for EDBs and Transpower

11. The average debt premium for EDBs and Transpower of 1.28% is the average of the debt premium values for the current debt premium reference year (DPRY) and the four previous DPRYs, as shown in Table 3 below.
12. The DPRY for EDBs and Transpower starts on 1 September and ends on 31 August.⁵ DPRY 2025 is the current DPRY for EDBs and Transpower.⁶

Table 3: Average debt premium for EDBs and Transpower (%)

	DPRY 2021	DPRY 2022	DPRY 2023	DPRY 2024	DPRY 2025	Average
Debt premium	1.55	1.15	1.25	1.40	1.05	1.28

13. The debt premium values are taken from the following sources:
 - 13.1 The debt premium value for the 2021 DPRY was estimated in the ID WACC determination published on 30 April 2021 for EDBs and Wellington International Airport Limited (WIAL).⁷

⁴ We interpolate between the two closest bonds surrounding a five-year remaining term. This requires taking the yields of the bonds with a remaining term immediately before and after the five-year term to maturity on that day. The target term to maturity is constant but the bonds' remaining terms to maturity decrease over time so the bonds immediately before and after the target term may change over time.

⁵ For example, DPRY 2025 for EDBs and Transpower is 1 September 2024 to 31 August 2025.

⁶ Commerce Commission, [Guidelines for WACC determinations under the cost of capital input methodologies \(post-IM review version\)](#) (27 June 2024), at [50].

⁷ Commerce Commission, [Cost of capital determination for disclosure year 2022 for information disclosure regulation. Electricity distribution businesses and Wellington International Airport](#) [2021] NZCC 4.

- 13.2 The debt premium value for the 2022 DPRY was estimated in the ID WACC determination published on 3 May 2022 for EDBs and WIAL.⁸
- 13.3 The debt premium value for the 2023 DPRY was estimated in the ID WACC determination published on 1 May 2023 for EDBs and WIAL.⁹
- 13.4 The debt premium value for the 2024 DPRY was estimated in the ID WACC determination published on 1 May 2024 for EDBs and WIAL.¹⁰
14. We have estimated a debt premium of 1.05% for the 2025 DPRY based on the data in Table 4 below.
- 14.1 We have had greatest regard to the category (a) bond, which matches the target sector and credit rating, with a somewhat shorter remaining term to maturity (3.7 years). This bond supports a debt premium of approximately 1.05%.
- 14.2 We have also noted the bonds issued by gentailers in category (b). The Mercury and Meridian bonds suggest a debt premium higher than 0.90%, supporting our estimate of 1.05%. The Genesis bond indicates an even higher debt premium of 1.25% and above.
- 14.3 The estimated debt premium for other issuers in bond categories (d) to (e) are not inconsistent with a debt premium of around 1.05%, when consideration is given to the different credit ratings and term to maturity (refer to the commentary column of Table 4 for details). The exception is the Contact Energy bond, which suggests a debt premium lower than 0.88%.
- 14.4 The Nelson-Siegel-Svensson (NSS) estimate of the debt premium of 1.05% also supports our estimate of 1.05%.

⁸ Commerce Commission, [Cost of capital determination for disclosure year 2023 for information disclosure regulation. Electricity distribution businesses and Wellington International Airport](#) [2022] NZCC 12.

⁹ Commerce Commission, [Cost of capital determination for disclosure year 2024 for information disclosure regulation. Electricity distribution businesses and Wellington International Airport](#) [2023] NZCC 8.

¹⁰ Commerce Commission, [Cost of capital determination for disclosure year 2025 for information disclosure regulation. Electricity distribution businesses and Wellington International Airport](#) [2024] NZCC 7.

Table 4: Debt premium estimate for EDBs and Transpower, DPRY 2025

	Sector	100% Govt owned	Bond credit rating	Remaining term to maturity (years)	Debt premium (%)
Benchmark bond	EDB/GPB	No	BBB+	5.0	1.05

Bond category	Issuer	Sector	100% Govt owned	Bond credit rating	Remaining term to maturity (years)	Debt premium (%)	Comments
a	Vector Limited	EDB/GPB	No	BBB+	3.70	0.96	5-year debt premium would be higher.
b	Air New Zealand Limited	Other	No	BBB+	4.20	1.53	5-year debt premium would be higher.
b	Genesis Energy Limited	Other	No	BBB+	4.70	1.25	5-year debt premium would be higher.
b	Mercury NZ Limited	Other	No	BBB+	4.30	0.91	5-year debt premium would be higher.
b	Meridian Energy Limited	Other	No	BBB+	4.60	0.90	5-year debt premium would be higher.
d	Auckland International Airport Limited	Airport	No	A-	4.70	0.82	BBB+ debt premium would be higher; 5-year debt premium would be higher.
d	Chorus Limited	Fibre	No	BBB	3.70	0.95	BBB+ debt premium would be lower; 5-year debt premium would be higher.
d	Contact Energy Limited	Other	No	BBB	5.10	0.88	BBB+ debt premium would be lower; 5-year debt premium would be lower.
d	Fonterra Co-operative Group Limited	Other	No	A-	1.70	0.69	BBB+ debt premium would be higher; 5-year debt premium would be higher.
d	Spark Finance Limited	Telco	No	A-	4.60	0.66	BBB+ debt premium would be higher; 5-year debt premium would be higher.
d	Wellington International Airport Limited	Airport	No	BBB	2.40	1.22	BBB+ debt premium would be lower; 5-year debt premium would be higher.
e	Christchurch International Airport Limited	Airport	Yes	A-	4.20	0.92	BBB+ debt premium would be higher; 5-year debt premium would be higher.
e	Transpower New Zealand Limited	Other	Yes	AA-	4.10	0.47	BBB+ debt premium would be higher; 5-year debt premium would be higher.

Notes on bonds analysed	
1	VCTNZ 3.69 11/26/27
2	AIRNZ 6.61 04/27/28
3	GENEPO 3.65 12/20/28
4	MCYNZ 5.64 06/19/28
5	MERINZ 5.91 09/20/28
6	AIANZ 5.29 11/17/28
7	CNUNZ 1.98 12/02/27
8	CENNZ 5.62 04/06/29
9	FCGNZ 4.15 11/14/25
10	SPKNZ 4.37 09/29/28
11	WIANZ 2 1/2 08/14/26
12	CHRINT 5.18 05/19/28
13	TPNZ 5.893 03/15/28

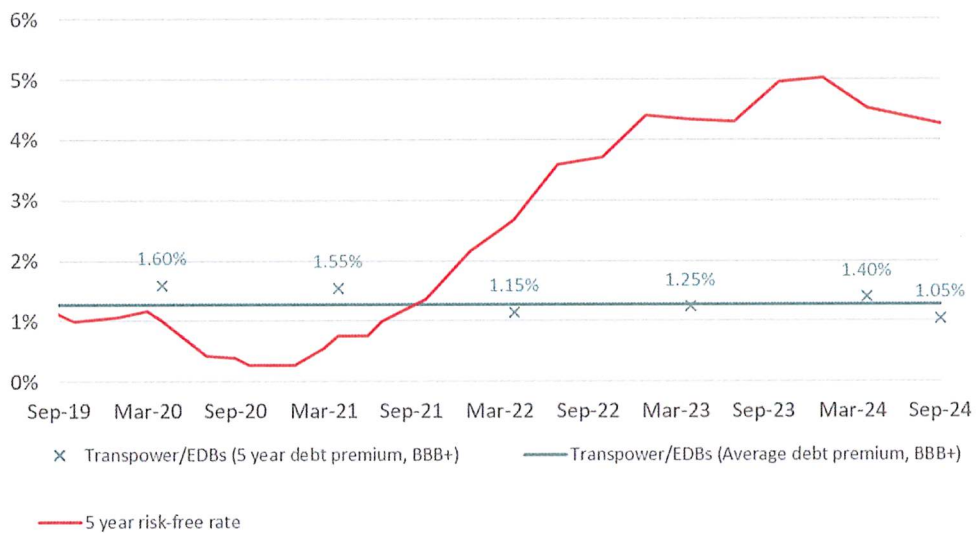
WACC range and 65th percentile estimate for EDBs and Transpower

- 15. In addition to the mid-point estimate, we are also required to determine a 65th percentile estimate for EDBs and Transpower.
- 16. The methodology for estimating the 65th WACC percentiles is set out in clause 4.4.5 and 3.5.5 of the EDB and Transpower IMs, respectively.¹¹

Changes in the risk-free rate and debt premium over time

- 17. The cost of capital input methodologies for regulated services (including for EDBs and Transpower) reflect that both the risk-free rate and the debt premium on bonds change over time. Figure 1 shows, as at 2 September 2024, changes over time in:
 - 17.1 The five-year risk-free rate; and
 - 17.2 The estimated debt premium on bonds rated BBB+ with a remaining term to maturity of five years.

Figure 1: Changes in the risk-free rates and estimated debt premiums over time



¹¹ Electricity Distribution Services Input Methodologies (IM Review 2023) Amendment Determination 2023 [2023] NZCC 35 (December 2023); Transpower Input Methodologies (IM Review 2023) Amendment Determination 2023 [2023] NZCC 38 (December 2023).

