9. Rate of Return, Taxation and Inflation

9.1 Introduction

This chapter outlines Powerlink's approach to the calculation of the rate of return (also referred to as the Weighted Average Cost of Capital or WACC), taxation and forecast inflation for the 2023-27 regulatory period.

Key highlights:

- We have applied the Australian Energy Regulator's (AER's) binding 2018 Rate of Return (RoR) Instrument. This results in an estimated post-tax nominal RoR of 4.44% for the first year of the 2023-27 regulatory period (2022/23). This comprises:
  - a return on equity of 4.48%; and
  - a return on debt of 4.42%. The return on debt is updated in each year of the regulatory period based on the AER's trailing average approach.
- Our return on capital allowance is the largest component of our building-block revenue. The return on capital represented $2,157.4m (55%) of our total Maximum Allowed Revenue (MAR) approved by the AER in its Final Decision for the 2018-22 regulatory period. It is forecast to be $1,377.7m (41%) of our total forecast MAR for the 2023-27 regulatory period.
- The main driver of our lower RoR is the historically low risk-free rate environment. The AER will update our RoR in its Final Decision for the prevailing risk-free rate at that time and updated trailing average return on debt over our approved averaging periods.
- We have estimated our taxation allowance using the AER's 2019 Post-Tax Revenue Model (PTRM), Version 4. This version of the PTRM gives effect to the changes arising from the AER's 2018 Regulatory Tax Approach Review[1].
- Our forecast for inflation is 2.25%. We have used the AER's current approach for estimating expected inflation[2] as specified in its 2019 PTRM.
- The AER published its Final Position Paper on its review of the treatment of inflation in December 2020[3]. This revised approach does not apply to Powerlink's 2023-27 Revenue Proposal. However, we understand the AER intends to apply its revised approach in our Draft and Final Decisions.

9.2 Regulatory requirements

Under the National Electricity Rules (the Rules)[4], our return on capital allowance is calculated by applying our allowed RoR to the opening value of our Regulatory Asset Base (RAB) in each year of the regulatory period.

Our allowed RoR[5] must be determined on the basis of the current RoR Instrument published by the AER[6]. These calculations are provided in the RoR Model included with our Revenue Proposal[7].

The Rules[8] also require the AER to specify in the PTRM a methodology that is likely to result in the best estimate of expected inflation.

Our corporate tax allowance must be calculated consistent with the Rules[9].

9.3 Rate of return

9.3.1 Overview

Our RoR for the first year of the 2023-27 regulatory period (2022/23) is shown in Table 9.1 and Table 9.2 summarises our forecast RoR for each year. We have included a brief guide to our key inputs and assumptions for our RoR, taxation and inflation in Attachment 1.

1 Review of Regulatory Tax Approach, Australian Energy Regulator, December 2018.
2 The geometric average of 10 annual expected inflation rates, using the RBA's forecast of inflation for the first two years and the mid-point of the RBA's inflation target band for the remaining eight years.
3 Regulatory Treatment of Inflation, Australian Energy Regulator, December 2020.
4 National Electricity Rules, clause 6A.6.2.
5 National Electricity Rules, Chapter 10, definition of allowed rate of return.
6 Rate of Return Instrument, Australian Energy Regulator, December 2018.
7 National Electricity Rules, schedule 6A.1, clause S6A.1.3(4A).
8 National Electricity Rules, clause 6A.5.3(b)(1).
9 National Electricity Rules, clause 6A.6.4.

Table 9.1: Rate of return for 2022/23

Parameter	Estimate
Gearing	60%
Risk-free rate – return on equity	0.82%
Equity beta	0.6
Market risk premium	6.10%
Return on equity	4.48%
Return on debt	4.42%
WACC – post-tax nominal[1]	4.44%

(1) A post-tax nominal vanilla WACC calculation applies a pre-tax cost of debt and post-tax cost of equity.

Table 9.2: Rate of return 2023-27

	2022/23	2023/24	2024/25	2025/26	2026/27
Return on debt	4.42%	4.22%	4.03%	3.83%	3.64%
Return on equity	4.48%	4.48%	4.48%	4.48%	4.48%
WACC – post-tax nominal	4.44%	4.32%	4.21%	4.09%	3.97%

The application of these rates of return to our forecast RAB results in the return on capital allowance outlined in Table 9.3.

Table 9.3: Return on capital allowance ($m nominal)

	2022/23	2023/24	2024/25	2025/26	2026/27	Total
Return on capital	309.0	302.1	295.6	286.5	277.1	**1,470.3**

9.3.2 Our approach

This section outlines our approach to calculating the RoR, which has the most significant impact on our final approved revenues and ultimately electricity prices. The RoR must be calculated consistent with the AER's 2018 RoR Instrument.

The AER will update the estimated return on equity and return on debt in its Final Decision to reflect our nominated (approved) averaging periods. These periods have been nominated on a confidential basis in Appendix 9.01 Nominated Averaging Periods.

Return on equity

We applied the AER's 2018 RoR Instrument, which results in an estimated return on equity for the 2023-27 regulatory period of 4.48%. For our Revenue Proposal we have adopted a risk-free rate over 20 business days ending 13 November 2020. This is a placeholder estimate only as the AER will calculate its Final Decision on the basis of our nominated period identified on a confidential basis in Appendix 9.01 Nominated Averaging Periods. The parameter values are presented in Table 9.4.

Table 9.4: Return on equity

Parameter	Estimate
Risk-free rate[1]	0.82%
Equity beta	0.6
Market risk premium	6.10%
Return on equity	4.48%

(1) Simple average of the daily ten year Commonwealth Government bond yields (converted to annual effective rates), over an averaging period of 20 business days up to and including the 13 November 2020.

Return on debt

Based on the application of the AER's 2018 RoR Instrument and our ongoing transition to a trailing average return on debt, our indicative return on debt for the first year of the regulatory period (2022/23) is 4.42%[10].

Under the trailing average approach, the AER will update our return on debt in each year of the regulatory period to reflect prevailing rates at that time. For the purpose of our Revenue Proposal, we have assumed that the prevailing return on debt is the same as that applied by the AER in our most recent annual update published in January 2020[11]. This results in the following estimates in Table 9.5.

Table 9.5: Return on debt 2023-27

	2022/23	2023/24	2024/25	2025/26	2026/27
Return on debt	4.42%	4.22%	4.03%	3.83%	3.64%

9.4 Taxation

9.4.1 Overview

Our taxation forecast for the 2023-27 regulatory period is presented in Table 9.6.

Table 9.6: Taxation ($m nominal)

	2022/23	2023/24	2024/25	2025/26	2026/27	Total
Corporate tax	5.1	1.0	8.0	23.9	24.5	62.5
Value of imputation credits	(3.0)	(0.6)	(4.7)	(14.0)	(14.3)	(36.6)
Taxation	**2.1**	**0.4**	**3.3**	**9.9**	**10.2**	**25.9**

9.4.2 Our approach

We estimate our taxation allowance using the AER's 2019 PTRM (Version 4)[12] based on the expected statutory income tax rate for each year of the regulatory period (30%) less the value of imputation credits (gamma)[13].

The AER's 2019 PTRM also gives effect to two key changes we have adopted from the AER's 2018 Regulatory Tax Approach Review[14], namely:

- adjustments to allow for the immediate expensing of certain costs (our capitalised overhead costs) for taxation purposes. We have used the AER's recommended method of an actuals informed approach to forecast our immediate expensing for the 2023-27 regulatory period; and
- the application of diminishing value depreciation (instead of straight-line) for new assets and capital expenditure (from 1 July 2022), with the exception of buildings, in-house software and equity raising costs. Straight-line depreciation continues to apply for existing assets.

For regulatory and tax depreciation, we propose to change from the use of a Weighted Average Remaining Life (WARL) to the more accurate year-by-year depreciation tracking (refer Chapter 10 Depreciation). The movements in the taxation forecast over the 2023-27 regulatory period reflect the transitional impact of moving to the year-by-year approach.

Consistent with the AER's 2018 RoR Instrument, we have adopted:

- a value of 0.585 to estimate the value of imputation credits (gamma); and
- a statutory tax rate of 30% per year.

[10] The Australian Energy Regulator (AER) approved our transition to a trailing average return on debt in its Final Decision for the 2017-22 regulatory period. The transition is occurring over 10 years and the full transition will be completed in the final year of the 2023-27 regulatory period, ie. 2026/27.

[11] Powerlink – Determination 2017-22 Update Return on Debt 2020-21, Australian Energy Regulator, January 2020.

[12] The Post-Tax Revenue Model (PTRM) determines notional taxable income and tax payable, accounting for deductions for tax depreciation calculated from the Tax Asset Base.

[13] National Electricity Rules, clause 6A.6.4.

[14] Regulatory Tax Approach Review, Australian Energy Regulator, December 2018.

Immediate expensing of capital expenditure

Our forecast of immediately deductible capital expenditure is based on actual immediate deductions of capitalised overheads over previous years. We confirm that we do not intend to change our current tax policy of immediately expensing capital expenditure.

Diminishing value depreciation

We have adopted the diminishing value (DV) method for tax depreciation for all new capital expenditure, with the exception of buildings and in-house software. We confirm that the forecast capex for buildings and in-house software satisfies the relevant definitions under the *Income Tax Assessment Act 1997* (ITAA) and will continue to be depreciated using the straight-line method over the 2023-27 regulatory period.

9.5 Forecast inflation

Our forecast inflation is 2.25%. For the purpose of our Revenue Proposal we are required to apply the AER's current approach to inflation specified in its 2019 PTRM, which estimates inflation using the Reserve Bank of Australia's (RBA's) forecast for the first two years and the mid-point of the RBA's inflation target band for the remaining eight years.

The AER released its Final Position Paper in December 2020[15] on the regulatory treatment of inflation. This has resulted in a change to the approach used to estimate the inflation forecast for future revenue determinations. The AER issued an amended PTRM to reflect its revised approach in December 2020 for consultation and intends to publish its final PTRM by April 2021.

We understand that the AER will apply its revised approach and amended PTRM in its Draft and Final Decisions on our Revenue Proposal.

Our Customer Panel requested information on the indicative impact of the AER's revised inflation approach to understand the implications for customers. Our estimate of inflation using the AER's revised method is 1.80% (versus 2.25% under the current method). In terms of MAR, the indicative impact of this lower inflation forecast over the 2023-27 regulatory period would be an increase of approximately $170.0m.

9.6 Summary

Our RoR and taxation allowance aligns with the relevant regulatory requirements (i.e. the AER's 2018 RoR Instrument and 2019 PTRM (Version 4)). We have used the AER's current approach to forecast inflation.

An overview of the key estimates for each element of our RoR, inflation and taxation is provided in Table 9.7.

Table 9.7: Rate of return, inflation and taxation estimates

Parameter	Estimate
Risk-free rate – return on equity	0.82%
Market risk premium	6.10%
Equity beta	0.6
Gearing	60%
Return on equity	4.48%
Return on debt	4.42%
WACC – post-tax nominal	**4.44%**
Inflation	**2.25%**
Gamma	**0.585**
Taxation rate	**30%**

[15] Regulatory Treatment of Inflation, Australian Energy Regulator, December 2020.