

11. Maximum Allowed Revenue and Price Impact

11.1 Introduction

This chapter outlines Powerlink’s Maximum Allowed Revenue (MAR) and forecast price impacts for the 2023-27 regulatory period.

Key highlights:

- Forecast MAR for the 2023-27 regulatory period is \$3,333.9m. This is \$587.4m (15%) lower than our allowed MAR for the 2018-22 regulatory period.
- The key driver of our reduced MAR is a lower forecast return on capital (refer Chapter 9 Rate of Return, Taxation and Inflation).
- The reduction in MAR results in a forecast reduction in the indicative transmission price in the first year of the next regulatory period of 11%. For average residential and small business customers, this represents an estimated saving in the first year of \$13 and \$23 respectively. This is on the basis of assumed tariffs and consumption¹.

11.2 Regulatory requirements

We have used the building-block approach outlined in the National Electricity Rules (the Rules)² to determine the MAR. The application of the building-block components produces the unsmoothed annual revenue requirement. This is demonstrated in Figure 11.1.

This revenue profile is then smoothed over the 2023-27 regulatory period based on an X-factor for the purpose of setting our final MAR and prices.

Figure 11.1: MAR building-block approach



Return on Capital = a measure of return on investments (capex)
 Return of Capital = annual regulatory depreciation allowance
 Opex = annual operating and maintenance cost allowance
 Tax = calculated effective company tax payable
 EBSS = carryover amounts for the Efficiency Benefit Sharing Scheme from the previous regulatory period
 CESS = carryover amounts for the Capital Expenditure Sharing Scheme from the previous regulatory period

11.3 Forecast total revenue

Our total MAR for each year of the 2023-27 regulatory period is shown in Table 11.1. This is based on the application of each of the revenue building-blocks, which results in an unsmoothed revenue requirement for the 2023-27 regulatory period. The approach used to calculate each building-block element is explained in Section 11.5.

¹ The transmission component of electricity bills is based on information from the Australian Energy Market Commission (AEMC) Electricity Price Trends Report, December 2020. Assumed residential consumption is based on the Queensland Competition Authority’s (QCA’s) annual Tariff II (residential) median energy usage of 4,061kWh p.a. Assumed small business consumption is based on the QCA’s annual Tariff 20 (small business) median energy usage of 6,831kWh p.a.

² National Electricity Rules, clause 6A.5.4.

Table 11.1: Unsmoothed revenue requirement (\$m nominal)

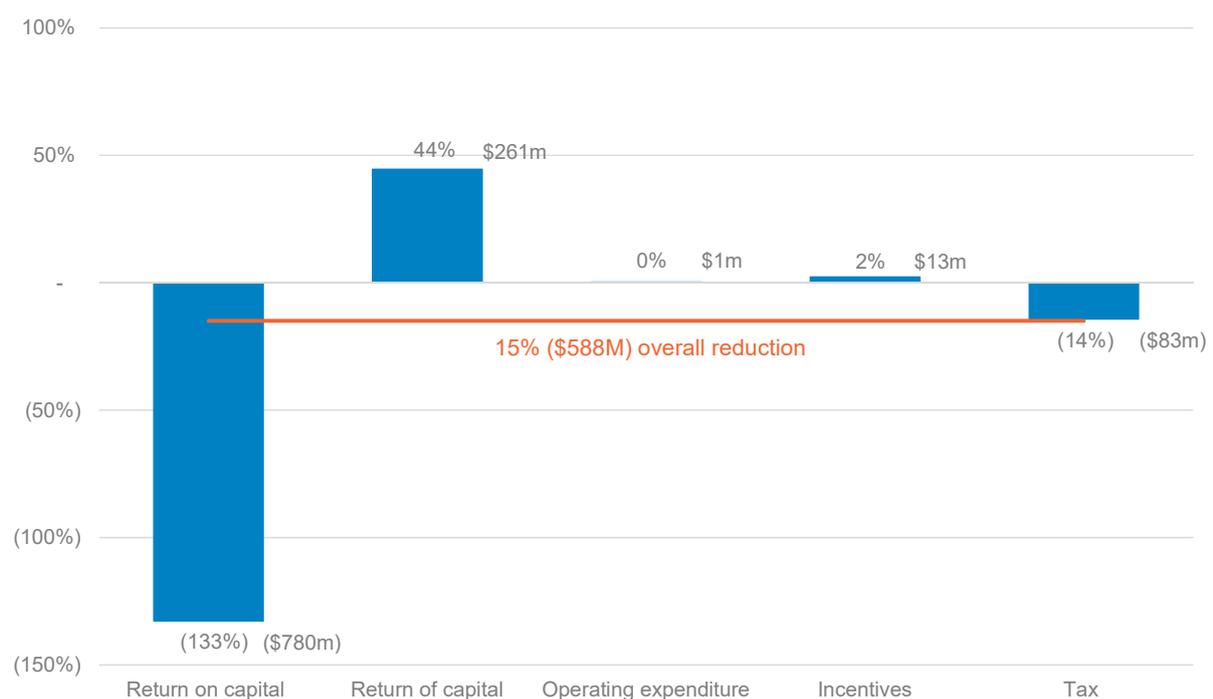
	2022/23	2023/24	2024/25	2025/26	2026/27	Total
Return on capital	309.0	302.1	295.6	286.5	277.1	1,470.3
Return of capital	169.2	180.3	189.6	197.7	206.9	943.7
Operating expenditure	212.1	219.3	223.6	229.4	234.9	1,119.3
Taxation allowance	2.1	0.4	3.3	9.9	10.2	25.9
Efficiency Benefit Sharing Scheme (EBSS) carryover	8.5	(8.0)	-	1.8	6.8	9.2
Capital Expenditure Sharing Scheme (CESS) carryover	(0.8)	(0.8)	(0.8)	(0.8)	(0.8)	(4.0)
Unsmoothed revenue requirement	700.2	693.4	711.3	724.5	735.0	3,564.4

11.4 Change in MAR from the 2018-22 regulatory period

Our MAR is forecast to decrease by \$587.4m (15%) compared to our allowed MAR for the 2018-22 regulatory period. Figure 11.2 shows the drivers of revenue change between the 2018-22 and 2023-27 regulatory periods. The key drivers are:

- *Return on capital*: \$779.7m lower due to the lower rate of return (refer Chapter 9 Rate of Return, Taxation and Inflation).
- *Return of capital*: \$261.2m higher due to the impact of a lower revaluation of the Regulatory Asset Base (RAB), the transitional impact from a change in our depreciation forecasting approach (refer Chapter 10 Depreciation) and an increase in depreciation from the recovery of prior years' indexation.
- *Incentives*: \$13.1m higher due to a forecast revenue increment under the EBSS (refer Chapter 14 Expenditure Incentive Schemes).
- *Tax*: \$83.3m lower, primarily due to the change in estimating taxation as a result of the Australian Energy Regulator's (AER's) 2018 Tax Review (refer Chapter 9 Rate of Return, Taxation and Inflation).

Figure 11.2: Drivers of revenue change



11.5 Our approach

We used the AER's 2019 Post-Tax Revenue Model (PTRM) (Version 4) to calculate the MAR. We have engaged with our customers on key changes to our approach that impact our MAR (refer Chapter 3 Customer Engagement).

The AER will update its revenue building-blocks for the relevant inputs and forecasts that underpin the MAR in its Final Decision.

11.5.1 Regulatory Asset Base

The value of our RAB determines our return on and return of capital allowances.

Our estimated opening RAB as at 1 July 2022 is \$6,958.4m (nominal). Our approach to calculating this is outlined in Chapter 8 Regulatory Asset Base.

We have forecast a roll-forward of our RAB for each year of the 2023-27 regulatory period based on our forecasts for inflation (refer Chapter 9 Rate of Return, Taxation and Inflation), capital expenditure (refer Chapter 5 Forecast Capital Expenditure) and regulatory depreciation (refer Chapter 10 Depreciation). This is summarised in Table 11.2.

Table 11.2: Forecast RAB roll-forward 2023-27 regulatory period (\$m nominal)

	2022/23	2023/24	2024/25	2025/26	2026/27
Opening RAB	6,958.4	6,985.4	7,025.2	7,004.2	6,973.4
Capital expenditure, as incurred ⁽¹⁾	196.2	220.1	168.6	166.9	172.4
Regulatory depreciation	(169.2)	(180.3)	(189.6)	(197.7)	(206.9)
Closing RAB	6,985.4	7,025.2	7,004.2	6,973.4	6,939.0

(1) Net of disposals, adjusted for inflation and one-half Weighted Average Cost of Capital (WACC) allowance³. The roll-forward also reflects capitalised movements in provisions.

11.5.2 Return on capital

The return on capital is calculated by applying our rate of return (also referred to as the Weighted Average Cost of Capital or WACC) to the opening RAB in each year of the regulatory period, as detailed in Chapter 9 Rate of Return, Taxation and Inflation.

Our return on capital forecast is presented in Table 11.3.

Table 11.3: Return on capital (\$m nominal)

	2022/23	2023/24	2024/25	2025/26	2026/27	Total
Opening RAB	6,958.4	6,985.4	7,025.2	7,004.2	6,973.4	N/A
Rate of return	4.44%	4.32%	4.21%	4.09%	3.97%	N/A
Return on capital	309.0	302.1	295.6	286.5	277.1	1,470.3

11.5.3 Return of capital

Our return of capital (also referred to as regulatory depreciation) is calculated by deducting the inflation adjustment made to the RAB from forecast depreciation (refer Chapter 10 Depreciation).

³ The PTRM calculates the return on capital based on the opening RAB and capital expenditure is assumed to occur half-way through the year. To address this timing difference, a half WACC is added to compensate for the six-month period before capital expenditure is included in the RAB.

Our return of capital forecast is presented in Table 11.4.

Table 11.4: Return of capital (\$m nominal)

	2022/23	2023/24	2024/25	2025/26	2026/27	Total
Straight-line depreciation ⁽¹⁾	325.7	337.4	347.6	355.2	363.7	1,729.5
Indexation on opening RAB	(156.5)	(157.1)	(158.0)	(157.5)	(156.8)	(785.8)
Return of capital	169.2	180.3	189.6	197.7	206.9	943.7

(1) Straight-line depreciation is a method of calculating depreciation whereby an asset is expensed consistently throughout its useful life.

11.5.4 Operating expenditure

Our operating expenditure forecast (refer Chapter 6 Forecast Operating Expenditure) is shown in Table 11.5.

Table 11.5: Operating expenditure (\$m nominal)

	2022/23	2023/24	2024/25	2025/26	2026/27	Total
Controllable operating expenditure and insurances	202.4	209.5	213.6	219.2	224.6	1,069.4
Australian Energy Market Commission (AEMC) levy	6.0	6.2	6.4	6.5	6.7	31.8
Debt raising costs	3.6	3.6	3.6	3.6	3.6	18.1
Total operating expenditure	212.1	219.3	223.6	229.4	234.9	1,119.3

11.5.5 Taxation

Our forecast for taxation, applying a value for imputation credits of 0.585 consistent with the AER's 2018 Rate of Return Instrument (refer Chapter 9 Rate of Return, Taxation and Inflation), is presented in Table 11.6.

Table 11.6: 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

11.5.6 EBSS and CESS

Any efficiency gains or losses arising from the EBSS and CESS in the 2018-22 regulatory period are carried over as an adjustment to the MAR in the 2023-27 regulatory period (referred to as a carryover amount).

Our EBSS and CESS carryover amounts (refer Chapter 14 Expenditure Incentive Schemes) from the 2018-22 regulatory period are summarised in Table 11.7.

Table 11.7: EBSS and CESS carryover amounts (\$m nominal)

	2022/23	2023/24	2024/25	2025/26	2026/27	Total
EBSS carryover	8.5	(8.0)	-	1.8	6.8	9.2
CESS carryover	(0.8)	(0.8)	(0.8)	(0.8)	(0.8)	(4.0)

11.6 X-factors and smoothed revenue

To reduce significant variations or smooth revenue in each year of our regulatory period, an X-factor is applied to our unsmoothed revenue requirement. As required by the Rules⁴, the smoothed and unsmoothed revenue requirements are equivalent in net present value terms and the difference between the smoothed and unsmoothed revenue in the final year of the 2023-27 regulatory period is minimal at 0.2%. This smoothed revenue profile is the MAR that is used to set our prices each year. Our X-factors and smoothed MAR for the 2023-27 regulatory period are summarised in Table 11.8.

Table 11.8: X-factors and smoothed MAR (\$m nominal)

	2022/23	2023/24	2024/25	2025/26	2026/27	Total
Unsmoothed revenue requirement	700.2	693.4	711.3	724.5	735.0	3,564.4
X-factors	12.59%	0.57%	0.57%	0.57%	0.57%	
Smoothed MAR	689.7	701.1	712.8	724.7	736.8	3,565.1

In real terms, our smoothed revenue for 2022/23 is forecast to reduce by 12.59% compared to our forecast revenue in 2021/22. In subsequent years of the regulatory period our annual revenue is forecast to reduce by 0.57% per annum in real terms. Overall, our total MAR for the 2023-27 regulatory period is forecast to be 15% less than our allowed MAR for the 2018-22 regulatory period.

Within period our MAR will be updated each year to reflect:

- actual inflation;
- changes to the annual return on debt; and
- any approved cost pass throughs (refer Chapter 12 Pass Through Events).

11.7 Average price path

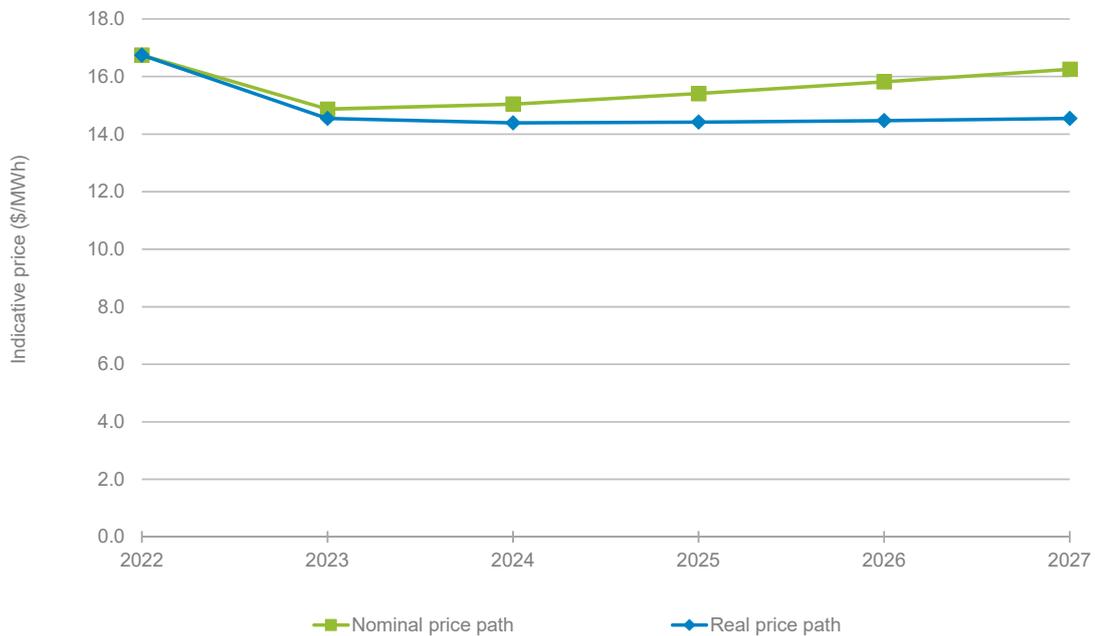
We calculate our annual prescribed transmission charges consistent with our approved Pricing Methodology (refer Chapter 16 Pricing Methodology), which must comply with the requirements of the Rules and the AER's Pricing Methodology Guidelines for transmission networks⁵.

To illustrate the indicative impact of our Revenue Proposal on average transmission prices under the regulatory framework, we divide our forecast MAR by forecast energy delivered in Queensland in each year of the 2023-27 regulatory period. This is shown in Figure 11.3.

⁴ National Electricity Rules, clause 6A.6.8(c).

⁵ Electricity Transmission Network Service Providers: Pricing Methodology Guidelines, Australian Energy Regulator, July 2014.

Figure 11.3: Indicative price path from 2021/22 to 2026/27



Powerlink’s contribution to the average Queensland electricity bill is currently 9% for households and small businesses⁶. This equates to approximately \$118.5 per annum for the average residential customer⁷ and approximately \$200.7 for the average small business⁸.

Based on our forecast revenue, the indicative impact on the transmission component of electricity prices in the first year of the next regulatory period (2022/23) would be:

- *Residential*: a nominal reduction of \$13 (11%), real reduction of approximately \$16 (13%).
- *Small Business*: a nominal reduction of \$23 (11%), real reduction of approximately \$26 (13%).

On average, price increases for these customers will remain in line with inflation (assumed forecast of 2.25%) for the remainder of the 2023-27 regulatory period.

The estimated impact of our forecast revenue on the transmission component of average annual electricity bills in each year of the 2023-27 regulatory period is shown in Table 11.9. The final year of the current regulatory period is included to show the change relative to the first year of the next regulatory period.

Table 11.9: Estimated impact to transmission component of average annual electricity bills (\$ nominal)

	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27
Residential annual bill ⁽¹⁾	118.5	105.2	106.4	109.0	111.9	115.0
Annual change	-	(13.3)	1.2	2.6	2.9	3.1
Small business annual bill ⁽²⁾	200.7	178.2	180.3	184.7	189.6	194.8
Annual change	-	(22.5)	2.1	4.4	4.9	5.2

(1) Based on the QCA’s annual Tariff 11 (residential) median energy usage of 4,061kWh per annum, March 2020.

(2) Based on the QCA’s annual Tariff 20 (small business) median energy usage of 6,831kWh per annum, March 2020.

⁶ Residential Electricity Price Trends Report 2020, Australian Energy Market Commission, December 2020.

⁷ Based on the QCA’s annual Tariff 11 (residential) median energy usage of 4,061kWh per annum, March 2020.

⁸ Based on the QCA’s annual Tariff 20 (small business) median energy usage of 6,831kWh per annum, March 2020.

11.8 Summary

Powerlink's MAR for the 2023-27 regulatory period is forecast to decline by \$587.4m (15%) compared to our allowed MAR for the 2018-22 regulatory period. This is primarily driven by a lower forecast rate of return.

Based on our forecast revenue, the indicative impact on the transmission component of electricity prices in the first year of the next regulatory period (2022/23) would be:

- *Residential*: a nominal reduction of \$13 (11%), real reduction of approximately \$16 (13%).
- *Small Business*: a nominal reduction of \$23 (11%), real reduction of approximately \$26 (13%).

We forecast average annual transmission prices over the 2023-27 regulatory period to remain in line with inflation.