8. Regulatory Asset Base

8.1 Introduction

This chapter outlines Powerlink's approach to calculate our opening Regulatory Asset Base (RAB) as at 1 July 2022 and our forecast RAB for each year of the 2023-27 regulatory period.

Key highlights:

- Our opening RAB as at 1 July 2022 is forecast to be $6,958.4m ($ nominal).
- The RAB is forecast to decrease by $19.4m in nominal terms and by $749.6m in real terms over the 2023-27 regulatory period[1]. The main driver for the real decline is a combination of lower capital expenditure in the forecast low demand growth environment and a higher depreciation profile.
- We propose to transfer $2.0m of non-prescribed assets into the RAB at 30 June 2022.
- We propose to remove $4.4m of prescribed assets from our RAB at 30 June 2022.
- The closing RAB as at 30 June 2027 is forecast to be $6,939.0m ($ nominal).
- During the current 2018-22 regulatory period, our RAB is forecast to decrease by $111.0m in nominal terms and by $621.9m in real terms[2].
- Our declining RAB profile since 2014/15 reflects our prudent asset management and reinvestment approach. In particular, where investment is required to address a network need, we do not necessarily replace like-for-like.

8.2 Regulatory requirements

The National Electricity Rules (the Rules)[3] set out how we must establish the opening value of our RAB. We are also required to provide the calculation of the RAB for each year of the current, 2018-22 regulatory period[4]. This is done using the Australian Energy Regulator's (AER's) 2020 Roll Forward Model (RFM) (Version 4).

In relation to additions to the RAB, the Rules[5] allow for the value of assets that previously provided non-prescribed transmission services to be transferred into the RAB as part of a revenue determination. The transfer amount is limited to the extent that such capital expenditure relates to an asset that is used for the provision of prescribed transmission services.

The Rules[6] also provide that the RAB is the value of assets used to provide prescribed transmission services, but only to the extent that they are used to provide such services. The Rules[7] require that the RAB for each year of the regulatory period be reduced by the disposal value of any asset disposed of in the period.

8.3 Our approach

We established the opening value of our RAB and rolled forward the value of that RAB in each year of the regulatory period consistent with the Rules[8].

We used the AER's 2020 RFM to establish the opening value at 1 July 2022 and the AER's 2019 Post-Tax Revenue Model (PTRM) (Version 4) to calculate the forecast RAB for the 2023-27 regulatory period.

We also propose to change to year-by-year depreciation tracking (refer Chapter 10 Depreciation) and have used the AER's 2020 Depreciation Tracking Module (Version 1).

Prior to the AER's Final Decision we will update our forecast opening RAB as at 1 July 2022 for 2020/21 actuals and, consequently, our forecast RAB roll forward for the 2023-27 regulatory period.

8.4 Opening RAB as at 1 July 2022

To establish the forecast opening RAB as at 1 July 2022 we adjust the opening RAB as at 1 July 2017 (refer Table 8.1).

1 Based on a comparison of 1 July 2022 opening RAB to 30 June 2027 closing RAB.
2 Based on a comparison of 1 July 2017 opening RAB to 30 June 2022 closing RAB.
3 National Electricity Rules, schedule 6A.2, clause S6A.2.1(f).
4 National Electricity Rules, clause 6A.6.1 and schedule 6A.1, clause S6A.1.3(5).
5 National Electricity Rules, schedule 6A.2, clause S6A.2.1(f)(8).
6 National Electricity Rules, clause 6A.6.1(a).
7 National Electricity Rules, schedule 6A.2, clause S6A.2.1(f)(6)
8 National Electricity Rules, schedule 6A.2, clause S6A.2.1(f).

Table 8.1: Establishment of opening RAB as at 1 July 2022 ($m nominal)

	2017/18	2018/19	2019/20	2020/21 (forecast)	2021/22 (forecast)
Opening RAB	7,069.4	7,094.5	7,105.5	7,103.2	7,003.7
Capital expenditure as incurred(1)	151.4	170.5	170.1	179.5	205.0
Regulatory depreciation(2)	(126.3)	(159.5)	(172.4)	(279.0)	(246.5)
Closing RAB	7,094.5	7,105.5	7,103.2	7,003.7	6,962.2
Difference between forecast and actual capital expenditure in 2016/17					(4.5)
Return on capital for the difference between forecast and actual expenditure 2016/17					(1.2)
Final year asset adjustment					2.0
Opening RAB as at 1 July 2022					**6,958.4**

(1) Net of disposals, adjusted for inflation and one-half Weighted Average Cost of Capital (WACC) allowance[9]. The roll forward also reflects forecast capitalised movements in provisions.

(2) Depreciation is based on forecast depreciation as approved by the AER for the 2018-22 regulatory period and is net of indexation applied to the RAB.

8.5 Forecast RAB for the 2023-27 regulatory period

The forecast RAB for the 2023-27 regulatory period applies the opening RAB at 1 July 2022, as calculated above, and is adjusted as shown in Table 8.2.

Table 8.2: 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 WACC allowance. The roll forward also reflects forecast capitalised movements in provisions

8.6 RAB additions and removals

Additions

The Rules[10] allow for the value of assets that previously provided non-prescribed transmission services to be transferred into the RAB as part of a revenue determination. The transfer amount is limited to the extent that such capital expenditure relates to an asset that is used for the provision of prescribed transmission services.

In December 2020, we flagged up to an estimated value of $50.0m of potential additions to our RAB to our customers, the AER and the AER's Consumer Challenge Panel (CCP23).

We have assessed these potential asset transfers and have included a value of $2.0m in the closing RAB at 30 June 2022 in our Revenue Proposal. This amount reflects the portion of non-prescribed assets that provide shared network services. In determining an appropriate transfer value, key consideration has been given to the Rules requirements, whether the initial investment has already been recovered and the forecast impact on customers.

We estimate the impact on customers from this inclusion is negligible and has not had any consequential impact on our operating or capital expenditure forecasts for the 2023-27 regulatory period.

[9] The Post-Tax Revenue Model (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 Weighted Average Cost of Capital (WACC) is added to compensate for the six-month period before capital expenditure is included in the RAB.

[10] National Electricity Rules, schedule 6A.2, clause 6A.2.1(f)(8).

Powerlink and the AER are also in confidential discussions in relation to an asset transfer matter which arose outside the Revenue Proposal process and was included in the $50.0m estimate above. We intend to resolve this matter prior to the AER's Final Decision on our 2023-27 Revenue Proposal.

Removals

We have removed $4.4m in assets from our RAB which have been repurposed to provide non-prescribed transmission services. This approach ensures that assets that have no enduring need for the provision of prescribed transmission services and can be repurposed, are removed from the RAB. It also means that customers who will derive benefit from use of the assets going forward will pay for them.

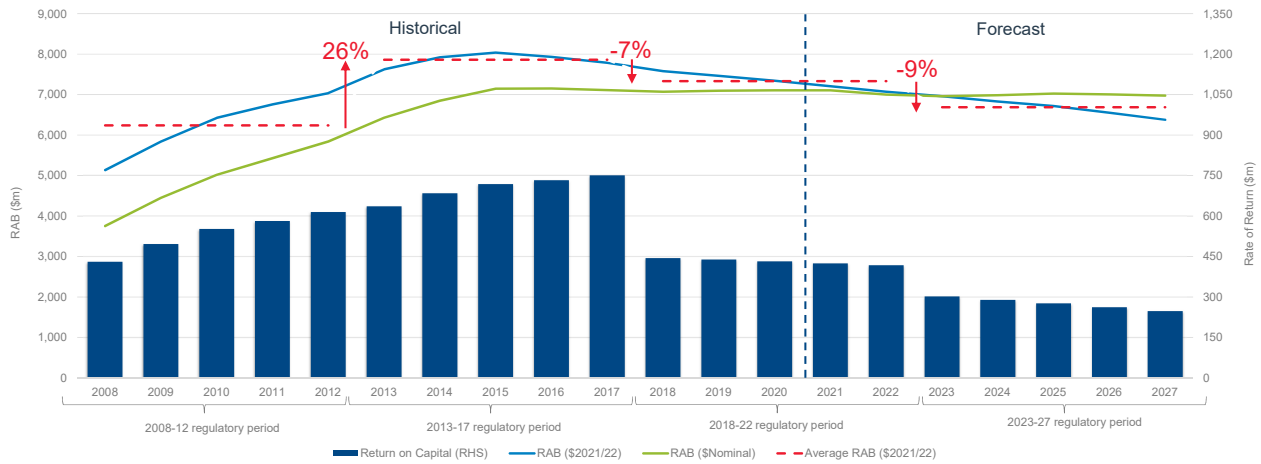
This adjustment has been effected by means of an asset disposal.

Given the commercial-in-confidence nature of additions and removals, further information to support our proposal is provided to the AER on a confidential basis in Appendix 8.01 Regulatory Asset Base Transfers.

8.7 Historical and forecast RAB

Figure 8.1 shows our RAB (in real and nominal terms), over the previous, current and next regulatory periods.

Figure 8.1: Regulatory Asset Base 2007/08 to 2026/27



The chart shows the growth in our RAB as a result of investments in our network over the two previous regulatory periods. In the current regulatory period our RAB has reduced in nominal and in real terms. This trend is forecast to continue through the 2023-27 regulatory period. The change in our RAB reflects an increased depreciation profile and lower capital expenditure in the context of a low load growth environment. Our declining RAB profile since 2014/15 reflects our prudent asset management and reinvestment approach. In particular, where investment is required to address a network need, we consider a range of options and do not necessarily replace like-for-like.

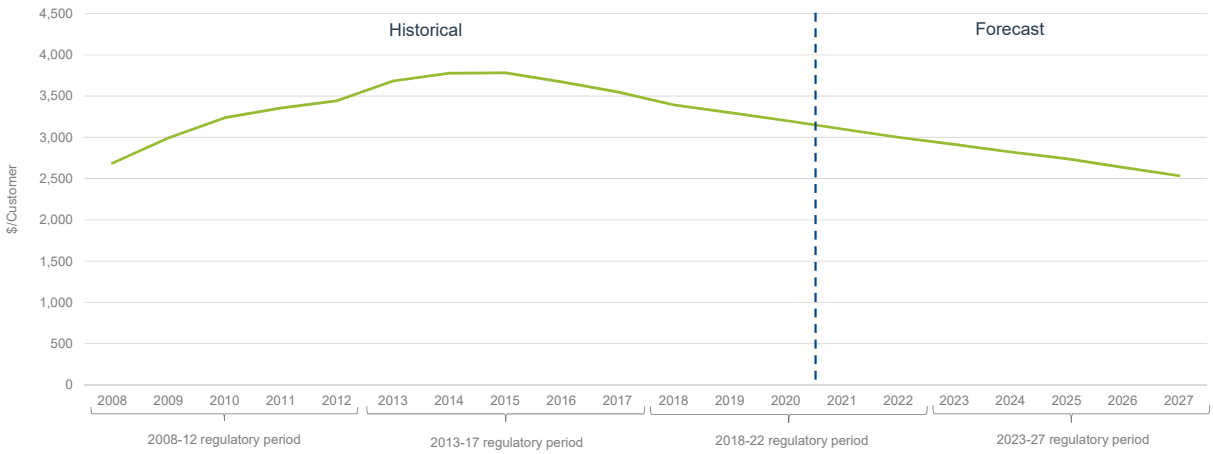
8.7.1 RAB metrics

Our Revenue Proposal Reference Group (RPRG) requested further information about our RAB against key metrics to help inform their views of our approach to asset management. We presented these metrics to the RPRG at our December 2020 meeting.

The two metrics provided are RAB per customer and RAB per MWh. Overall, both measures show a decline since 2014/15, which is favourable to customers.

Our RAB per customer, as shown in Figure 8.2 below, has declined at an average rate of 3% per annum over the current regulatory period, and is forecast to continue to decline at this rate in the 2023-27 regulatory period. This is driven by a combination of a reduction in our RAB and an increase in customer numbers.

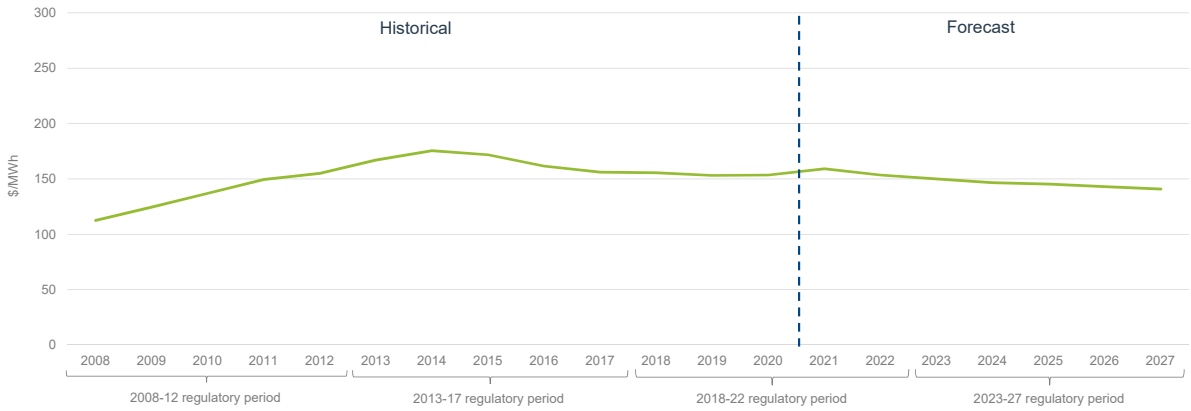
Figure 8.2: RAB per customer ($ real, 2021/22)



Source: Economic Insights, Powerlink[11].

Our RAB per MWh, as shown is Figure 8.3 below, has remained relatively flat during the current regulatory period, and is forecast to decline at a rate of 2% per annum in the 2023-27 regulatory period. This is driven by a reduction in the RAB and flat or declining delivered energy forecasts. The total delivered energy is expected to decline at an average annual rate of 0.7% over the next 10 years[12]. The forecast decline in RAB is in line with the forecast low demand environment.

Figure 8.3: RAB per MWh ($ real, 2021/22)



8.8 Summary

Our opening RAB as at 1 July 2022 is forecast to be $6,958.4m. It is forecast to decrease by $19.4m in nominal terms and by $749.6m in real terms ($ 2021/22) over the 2023-27 regulatory period.

We propose to transfer $2.4m, in net terms, of prescribed assets out of our RAB as at 30 June 2022.

[11] Customer numbers sourced from transmission benchmarking data files for the Economic Benchmarking Results for the Australian Energy Regulator's 2020 TNSP Annual Benchmarking Report, Economic Insights, October 2020. Forecast values trended forward and RAB sourced from Powerlink data.

[12] 2020 Electricity Statement of Opportunities, Australian Energy Market Operator, August 2020.