10. Depreciation

10.1 Introduction

This chapter outlines Powerlink's proposed return of capital allowance (also referred to as regulatory depreciation) for the 2023-27 regulatory period. Depreciation is an allowance that enables capital investors to recover their investment over the economic life of the asset.

Key highlights:

- Our proposed regulatory depreciation forecast for the 2023-27 regulatory period is $881.3m. This is $261.2m higher than our allowance for the 2018-22 regulatory period, due to a change in the depreciation forecasting approach, lower forecast inflation reducing the inflation adjustment and an increase in depreciation from the recovery of prior years' indexation. This will be updated by the Australian Energy Regulator (AER) in its Final Decision for the final approved inputs.
- We propose to change our depreciation forecasting method from a Weighted Average Remaining Life (WARL) approach to the more accurate year-by-year depreciation tracking approach. In response to feedback from our customers, we also propose a minor transitional adjustment to smooth the revenue impact of this change.
- We do not propose any accelerated depreciation for the 2023-27 regulatory period.

10.2 Regulatory requirements

We have calculated depreciation consistent with the National Electricity Rules (the Rules)[1]. Depreciation schedules must use a profile that reflects the nature of the asset class over the economic life of that asset class.

10.3 Depreciation forecast

Under the regulatory framework, regulatory depreciation is calculated as straight-line depreciation less the inflation adjustment on the opening Regulatory Asset Base (RAB). Straight-line depreciation is a method of calculating depreciation whereby an asset's value is reduced consistently throughout its useful life. Each year, the opening RAB (or RAB at the start of the relevant financial year) is indexed by inflation to maintain the real value of the RAB over time[2].

Our depreciation forecast for the 2023-27 regulatory period is set out in Table 10.1.

Table 10.1: Forecast regulatory depreciation 2023-27 regulatory period ($m real, 2021/22)

	2022/23	2023/24	2024/25	2025/26	2026/27	Total
Straight-line depreciation(1)	318.6	322.7	325.1	325.0	325.4	1,616.8
Less inflation(2) adjustment on Opening RAB	(153.0)	(150.2)	(147.8)	(144.1)	(140.3)	(735.5)
Regulatory depreciation	**165.5**	**172.5**	**177.3**	**180.9**	**185.1**	**881.3**

(1) We have adjusted for forecast capital expenditure and asset disposals in each year of the regulatory period. Depreciation is calculated on these adjusted RAB values.

(2) Based on an inflation estimate of 2.25% (refer Chapter 9 Rate of Return, taxation and inflation).

Depreciation is forecast to be $881.3m. This is $261.2m or 42% higher than the approved allowance for the 2018-22 regulatory period. This is due to several key drivers which include:

- the transitional impact from the change to the year-by-year tracking approach, as the remaining lives of existing assets are no longer combined with new assets in the current regulatory period;
- the lower inflation adjustment – which means the RAB is reduced by a lower amount than determined in the AER's 2017 Final Decision on our Revenue Proposal for the current regulatory period; and
- an increase in the depreciation profile associated with the recovery of the indexation on assets over time. Assets are indexed by inflation each year. As their value is depreciated over their useful lives, the depreciation of accumulated indexation increases over time.

1 National Electricity Rules, clause 6A.6.3.
2 National Electricity Rules, schedule S6A.2, clause 6A.2.4(c)(4).

This forecast reflects the inputs in our Revenue Proposal and will be updated by the AER in its Final Decision. The updated forecast will reflect any changes that impact the roll forward of our RAB (including forecast capital expenditure and asset disposals), along with the updated inflation forecast.

10.4 Our approach

We have calculated regulatory depreciation as forecast depreciation less the inflation adjustment made to the opening RAB.

We have calculated depreciation consistent with the Rules[3] and relevant Australian Accounting Standards[4]. We used the AER's 2019 Post-Tax Revenue Model (PTRM) (Version 4) to calculate the depreciation forecast for new assets from 1 July 2022 and the AER's 2020 Depreciation Tracking Module (Version 1) for existing assets as at 30 June 2022.

Proposed changes to our approach for the 2023-27 regulatory period are summarised below.

10.4.1 Year-by-year depreciation tracking

We propose to move from a WARL approach to a year-by-year depreciation tracking approach. Both methods meet the requirements of the Rules[5]. The year-by-year tracking approach groups new capital expenditure by asset class, then separately depreciates each class over the approved standard lives. It is therefore more accurate than the WARL approach and ensures that the recovery profile of our costs better reflects the economic lives of our assets. The year-by-year approach has been accepted by the AER in other recent regulatory decisions[6] for these reasons.

We consulted with our Revenue Proposal Reference Group (RPRG) and Customer Panel on the transitional impacts to our customers (i.e. an estimated increase to our revenue in the 2023-27 regulatory period) as a result of this change in approach[7].

The RPRG and Customer Panel recognised the year-by-year approach is more accurate, but expressed concerns over the increase in revenue. Members asked that we consider ways to smooth the revenue impact of the change in approach, potentially across two regulatory periods.

As a result of our investigation, we identified the secondary systems asset class as one of the main contributors to this transitional impact. This asset class has a relatively high value of assets with a short life. We therefore propose a minor adjustment to extend the WARL of the existing secondary systems assets at 30 June 2017 from 9.82 years to 11 years, which will reduce the impact of the change in depreciation approach on customers.

This proposed asset life change responds to feedback from our customers and still results in a WARL that appropriately reflects the economic lives of the underlying assets. We have discussed this approach with AER staff.

We have provided our year-by-year depreciation tracking model with our Revenue Proposal. Further information is included in Appendix 10.01 Depreciation Tracking Approach.

10.4.2 Use of forecast depreciation

The AER determined that it will use forecast depreciation to:

- roll forward the RAB for the 2018-22 regulatory period to establish our opening RAB as at 1 July 2022[8]; and
- establish our opening RAB as at 1 July 2027 for commencement of the 2028-32 regulatory period[9].

10.5 Asset classes and asset lives

The change from WARL to a year-by-year tracking approach means it will no longer be necessary to determine remaining asset lives for the various asset classes. The standard lives we propose to apply to each asset class are shown in Table 10.2. We propose to apply the same standard asset lives for the 2023-27 regulatory period as applied in the current regulatory period.

3 National Electricity Rules, clause 6A.6.3.
4 Australian Accounting Standard AASB 116 Property, Plant and Equipment.
5 National Electricity Rules, clause 6A.6.3(b).
6 Draft Decisions for United Energy, AusNet Services, Jemena, CitiPower and Powercor, Australian Energy Regulator, September 2020.
7 Presentation and minutes of the June 2020 Revenue Proposal Reference Group (RPRG) meeting, Powerlink, https://www.powerlink.com.au/2023-2027-regulatory-period.
8 Powerlink 2017-22 Final Decision, Attachment 2 – Regulatory Asset Base, Australian Energy Regulator, April 2017.
9 Powerlink Final Framework and Approach Paper 2022-27, Australian Energy Regulator, July 2020.

Table 10.2: Standard asset lives – as at 30 June 2022 (years)

Asset class	Standard life
Overhead lines	50
Underground lines	45
Lines (refit)	30
Substations primary plant	40
Substations secondary systems	15
Communications (civil works)	40
Communications – other assets	15
Network switching centres	12
Land	n/a(1)
Easements	n/a(1)
Commercial buildings	40
Computer equipment	5
Office furniture and miscellaneous	7
Office machines	7
Vehicles	7
Moveable plant	7
Insurance spares	n/a(1)

(1) Asset classes marked n/a do not depreciate.

10.6 Summary

Our depreciation forecast has been calculated consistent with regulatory and accounting requirements, using the AER's 2019 PTRM (Version 4), 2020 Roll Forward Model (RFM) (Version 4) and 2020 Depreciation Tracking Module (Version 1).

In its Final Decision on our 2023-27 Revenue Proposal, the AER will update our proposed forecast for final approved inputs.

We propose to change from the use of WARL to year-by-year depreciation tracking to forecast depreciation. We have proposed a minor extension to the WARL of the secondary systems asset class to reduce the impact of this change on consumers.