



DRAFT DECISION

Powercor Distribution Determination 2021 to 2026

Attachment 2 Regulatory asset base

September 2020

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Note

This attachment forms part of the AER's draft decision on the distribution determination that will apply to Powercor for the 2021–26 regulatory control period. It should be read with all other parts of the draft decision.

The draft decision includes the following attachments:

Overview

Attachment 1 – Annual revenue requirement

Attachment 2 – Regulatory asset base

Attachment 3 – Rate of return

Attachment 4 – Regulatory depreciation

Attachment 5 – Capital expenditure

Attachment 6 – Operating expenditure

Attachment 7 – Corporate income tax

Attachment 8 – Efficiency benefit sharing scheme

Attachment 9 – Capital expenditure sharing scheme

Attachment 10 – Service target performance incentive scheme

Attachment 11 – Demand management incentive scheme and demand management innovation allowance mechanism

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Attachment 19 – Tariff structure statement

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2 Regulatory asset base

Our distribution determination includes Powercor's opening regulatory asset base (RAB) value as at 1 July 2021 and the projected RAB value for the 2021–26 regulatory control period.¹ The value of the RAB substantially impacts Powercor's revenue requirement, and the price consumers ultimately pay. Other things being equal, a higher RAB would increase both the return on capital and return of capital (depreciation) components of the distribution determination.² This draft decision sets out:

- the opening RAB as at 1 July 2021
- the forecast closing RAB as at 30 June 2026
- that depreciation based on forecast capital expenditure (capex) is to be used for establishing the RAB as at the commencement of the 2026–31 regulatory control period.³

2.1 Draft decision

We determine an opening RAB value of \$4496.9 million (\$ nominal) as at 1 July 2021 for Powercor. This value is \$76.4 million (or 1.7 per cent) lower than Powercor's proposed opening RAB of \$4573.4 million (\$ nominal) as at 1 July 2021.⁴ While we largely accept the proposed methodology for calculating the opening RAB, we made the following amendments to Powercor's proposed inputs to the roll forward model (RFM):

- Amended the proposed end of period re-allocation for the asset class of 'Accelerated depreciation assets'. This relates to the accelerated depreciation of assets relating to its Rapid Earth Fault Current Limiters (REFCL) program and other assets, and our detailed reasons for this amendment are set out in section 4.4.2 of Attachment 4 of this draft decision.
- Amended the forecast depreciation amounts, an input for the RAB roll forward calculation, for the 2020 'Distribution system assets', 2020 'SCADA/Network control' and 2017–20 'Equity raising cost (ERC)' asset classes to be consistent with the values in the 2020 return on debt update in the 2016–20 post-tax revenue model (PTRM), as required under the 2016–20 distribution determination.⁵

¹ NER, cl. 6.12.1(6).

² The size of the RAB also impacts the benchmark debt raising cost allowance. However, this amount is usually relatively small and therefore not a significant determinant of revenues overall.

³ NER, cl. 6.12.1(18).

⁴ Powercor, *PAL MOD 10.01 - RFM 5.5 year 2016–21*, January 2020.

⁵ AER, *Final decision Powercor distribution determination 2016 to 2020, Attachment 2*, p. 13, May 2016
The 2016–20 final decision is to roll forward the RAB for the commencement of Powercor's next regulatory control period using depreciation based on forecast capex (updated for actual inflation).

- Amended the estimated gross capex and customer contribution inputs for 1 January to 30 June 2021 to be equal to half of the total amount for the 2020–21 financial year as set out in the reset regulatory information notice (RIN).
- Removed the ‘Old SWER ACRs’ asset class as the assets have effectively been fully depreciated. There is no new capex allocated to this asset class during the 2021–26 regulatory control period.
- Amended the 2016 equity raising cost value to be consistent with the 2020 return on debt update in the 2016–20 PTRM.
- Amended the 2018 capex inputs based on amendments to movements in capitalised provisions.
- Updated the following inputs as newer information has become available since Powercor submitted its proposal:
 - actual capex for 2019 reported in the annual RIN for that year
 - actual inflation for the six month period of 1 January to 30 June 2021, reflecting the lagged consumer price index (CPI) series
 - forecast inputs for inflation, nominal weighted average cost of capital (WACC), equity raising costs and depreciation for the six month period of 1 January to 30 June 2021.

To determine the opening RAB as at 1 July 2021, we have rolled forward the RAB over the 2016–20 regulatory control period and a further roll forward for six months (the 1 January to 30 June period)⁶ to arrive at a closing RAB value at 30 June 2021 in accordance with our RFMs.⁷ This roll forward process includes an adjustment at the end of the 2016–20 regulatory control period to account for the difference between actual 2015 capex and the estimate approved in the 2016–20 determination.⁸ All other adjustments are applied as part of the final year adjustments at 30 June 2021 to establish the opening RAB value at 1 July 2021.⁹

Table 2.1 sets out the roll forward of Powercor's RAB over the 2016–2021 period.

⁶ The additional roll forward for six months is due to the decision by the Victorian government to change the timing of the annual Victorian electricity network price changes to financial year basis from calendar year basis. This change means the current regulatory control period of 2016–20 is extended by six months and the next regulatory control period will commence on 1 July 2021.

⁷ We have provided Powercor with a set of regulatory models and a summary of modelling requirements for the Victorian 2021–26 regulatory determinations. This includes a RFM for the 2016–20 regulatory control period and a RFM for the 2016–21 period.

⁸ The end of period adjustment will be positive (negative) if actual capex is higher (lower) than the estimate approved at the 2016–20 determination.

⁹ This includes accelerated depreciation for the replacement of assets relating to its REFCL program and other assets. Please see section 4.4.2 of attachment 4 for details.

Table 2.1 AER's draft decision on Powercor's RAB for the 2016–21 period (\$ million, nominal)

	2016	2017	2018	2019	2020 ^a	2021 ^b
Opening RAB	3307.0	3453.2	3646.3	3871.7	4089.2	4314.6
Capital expenditure ^c	282.0	336.0	350.4	355.7	394.2	233.5
Inflation indexation on opening RAB	50.0	35.3	70.5	80.4	65.1	52.6
Less: straight-line depreciation ^d	185.7	178.3	195.5	218.6	229.7	103.8
Interim closing RAB	3453.2	3646.3	3871.7	4089.2	4318.8	4496.9
Difference between estimated and actual capex in 2015					-3.2	
Return on difference for 2015 capex					-0.9	
Closing RAB as at 31 December 2020					4314.6	
Closing RAB as at 30 June 2021						4496.9

Source: AER analysis.

- (a) Based on estimated capex provided by Powercor. We expect to update the RAB roll forward for actual capex in the final decision.
- (b) The half year period of 1 January to 30 June 2021. Based on estimated capex provided by Powercor. We expect to update the RAB roll forward with a revised capex estimate in the final decision, and true-up the RAB for actual capex at the next reset.
- (c) Net of disposals and capital contributions, and adjusted for actual CPI and half-year WACC.

We determine a forecast closing RAB value as at 30 June 2026 of \$5469.7 million (\$ nominal) for Powercor. This is \$654.8 million or 10.7 per cent lower than Powercor's proposed closing RAB value of \$6124.5 million (\$ nominal).¹⁰ Our draft decision on the forecast closing RAB value reflects the amended opening RAB as at 1 July 2021, and our draft decisions on the expected inflation rate (Attachment 3), forecast depreciation (Attachment 4) and forecast capex (Attachment 5).¹¹ The major driver of the difference in the closing RAB has been our draft decision to reduce Powercor's proposed forecast capex by \$627.6 million (\$ nominal) or 27.2 per cent.

Table 2.2 sets out our draft decision on the forecast RAB values for Powercor over the 2021–26 regulatory control period.

¹⁰ Powercor, *PAL MOD 10.01 - RFM 5.5 year 2016–21*, January 2020.

¹¹ Capex enters the RAB net of forecast disposals. It includes equity raising costs (where relevant) and the half-year WACC to account for the timing assumptions in the PTRM. Therefore, our draft decision on the forecast RAB also reflects our amendments to the rate of return for the 2021–26 regulatory control period (Attachment 3).

Table 2.2 AER's draft decision on Powercor' RAB for the 2021–26 regulatory control period (\$ million, nominal)

	2021–22	2022–23	2023–24	2024–25	2025–26
Opening RAB	4496.9	4720.7	5010.2	5205.1	5351.9
Capital expenditure ^a	344.4	422.0	338.4	298.0	280.5
Inflation indexation on opening RAB	106.8	112.1	119.0	123.6	127.1
Less: straight-line depreciation	227.5	244.5	262.4	274.9	289.8
Closing RAB	4720.7	5010.2	5205.1	5351.9	5469.7

Source: AER analysis.

(a) Net of forecast disposals and capital contributions. In accordance with the timing assumptions of the PTRM, the capex includes a half-year WACC allowance to compensate for the six month period before capex is added to the RAB for revenue modelling.

We accept Powercor's proposal that the forecast depreciation approach is to be used to establish the opening RAB at the commencement of the 2026–31 regulatory control period.¹² We consider this approach is consistent with our *Framework and approach* paper.¹³ It is also consistent with the capital expenditure incentive objective in that it will provide sufficient incentives for Powercor to achieve capex efficiency gains over the 2021–26 regulatory control period.

2.2 Powercor's proposal

Powercor used our RFM to establish an opening RAB as at 1 July 2021 and our PTRM to roll forward the RAB over the 2021–26 regulatory control period.

Powercor proposed an opening RAB value as at 1 January 2016 of \$3307.0 million (\$ nominal). Rolling forward this RAB with actual/estimated capex and using depreciation based on forecast capex approved for the 2016–21 period, Powercor proposed a closing RAB value of \$4573.4 million (\$ nominal) as at 30 June 2021.

¹² NER, cl. 6.12.1(18).

Powercor, *Regulatory proposal 2021–2026*, January 2020, p. 148.

¹³ AER, *Final framework and approach for AusNet, CitiPower, Powercor, Jemena, and United Energy*, January 2019, p. 12.

Table 2.3 sets out Powercor's proposed roll forward of its RAB during the 2016–21 period.¹⁴

Table 2.3 Powercor's proposed RAB for the 2016–21 regulatory control period (\$ million, nominal)

	2016	2017	2018	2019 ^a	2020 ^a	Jan-June 2021 ^a
Opening RAB	3307.0	3453.3	3646.3	3871.5	4105.6	4331.2
Capital expenditure ^b	282.0	336.0	350.2	372.2	394.2	302.5
Inflation indexation on opening RAB	50.0	35.3	70.5	80.4	65.4	43.1
Less: straight-line depreciation ^c	185.7	178.3	195.5	218.6	229.9	103.4
Interim closing RAB	3453.3	3646.3	3871.5	4105.6	4335.3	4573.4
Difference between estimated and actual capex in 2015					-3.2	
Return on difference for 2015 capex					-0.9	
Closing RAB as at 30 June 2020					4331.2	
Closing RAB as at 30 June 2021						4573.4

Source: Powercor, *PAL MOD 10.01 - RFM 5.5 year 2016–21*, January 2020.

(a) Based on estimated capex.

(b) Net of disposals and capital contributions, and adjusted for CPI and half-year WACC.

(c) Adjusted for actual CPI. Based on forecast capex.

Powercor proposed a forecast closing RAB as at 30 June 2026 of \$6124.5 million (\$ nominal). This value reflects its proposed opening RAB, forecast capex, expected inflation, and depreciation (based on forecast capex) over the 2021–26 regulatory control period. Its projected RAB over the 2021–26 regulatory control period is shown in Table 2.4.

¹⁴ Powercor, *PAL MOD 10.01 - RFM 5.5 year 2016–21 - Jan2020 - Public*, January 2020.

Table 2.4 Powercor's proposed RAB for the 2021–26 regulatory control period (\$ million, nominal)

	2021–22	2022–23	2023–24	2024–25	2025–26
Opening RAB	4573.4	4978.4	5362.9	5653.4	5901.6
Capital expenditure ^a	536.6	526.7	446.1	407.6	393.9
Inflation indexation on opening RAB	109.8	119.5	128.7	135.7	141.6
Less: straight-line depreciation	241.3	261.7	284.3	295.2	312.6
Closing RAB	4978.4	5362.9	5653.4	5901.6	6124.5

Source: Powercor, *PAL MOD 10.01 - RFM 5.5 year 2016–21*, January 2020.

(a) Net of forecast disposals and capital contributions. In accordance with the timing assumptions of the PTRM, the capex includes a half-year WACC allowance to compensate for the six month period before capex is added to the RAB for revenue modelling.

Powercor proposed to apply a forecast depreciation approach to establish the RAB at the commencement of the 2026–31 regulatory control period, consistent with the approach set out in our *Framework and approach paper*.¹⁵

2.3 Assessment approach

We roll forward Powercor's RAB over the 2016–20 period to arrive at an opening RAB value at 1 January 2021. This value can be adjusted for any differences in estimated and actual capex.¹⁶ We then further roll forward the RAB by six months (January to June of 2021) to establish the opening RAB at 1 July 2021.¹⁷ The opening RAB may also be adjusted to reflect any changes in the use of the assets, with only assets used to provide standard control services to be included in the RAB.¹⁸

To determine the opening RAB at 1 July 2021, we developed RFMs that the distributor must use in preparing its proposal.¹⁹ We used the RFMs to roll forward Powercor's RAB from the beginning of the final year of the 2011–15 regulatory control period,²⁰

¹⁵ Powercor, *Regulatory proposal*, January 2020, p. 148.
AER, *Final framework and approach for AusNet Services, AusNet Services, Jemena, Powercor and United Energy*, January 2019, p. 12.

¹⁶ NER, cl. S6.2.1(e)(3).

¹⁷ The additional six months roll forward is due to the decision by the Victorian state government to change the timing of the annual Victorian electricity and gas network prices changes from calendar year basis into financial year basis. This intended change means current regulatory control period is extended by six months and the next regulatory control period will commence on 1 July 2021.

¹⁸ NER, cl. S6.2.1(e)(7).

¹⁹ This includes a RFM that applied to the 2016–20 distribution determination and a modified RFM that provides for a further roll forward of the RAB for the six months of 1 January to 30 June 2021.

²⁰ NER, cl. S6.2.1(e)(3). The roll forward commences in the final year of the 2011–15 regulatory control period to allow us to adjust for the difference between 2015 actual and estimated capex used in our 2015 distribution

through the 2016–20 period, and for a six month period from 1 January to 30 June 2021 (the beginning of the 2021–26 regulatory control period).

The roll forward for each year (and half year) of the above period occurs by:

- Adding actual inflation (indexation adjustment) to the opening RAB for the relevant year. This adjustment is consistent with the inflation factor used in the control mechanism.²¹
- Adding actual or estimated capex to the RAB for the relevant year.²² We review a distributor's past capex and may exclude past capex from being rolled into the RAB where total capex exceeds the regulatory allowance.²³ The details of our assessment approach for capex overspending are set out in the *Capital expenditure incentive guideline*.²⁴ We note that under the transitional rules, our review of past capex does not apply to Powercor prior to 1 January 2014.²⁵ Also, the review of past capex does not include the last year of the 2016–20 regulatory control period and the half year period for 1 January to 30 June 2021—these will instead be reviewed at the next reset.²⁶ We check actual capex amounts against audited annual reporting RIN data and generally accept the capex reported in those RINs in rolling forward the RAB.²⁷ However, there may be instances where adjustments are required to the annual reporting RIN data.²⁸
- Subtracting depreciation from the RAB for the relevant year, calculated in accordance with the relevant distribution determination for the previous regulatory control period.²⁹ Depreciation based on forecast or actual capex can be used to roll forward the RAB.³⁰ For this draft decision, we use depreciation based on forecast capex for rolling forward Powercor's RAB over the 2016–21 period.³¹ Depreciation based on forecast capex will also be used to roll forward the RAB over the 2021–26 regulatory control period at the next reset.³²

determination. The end of period adjustment related to 2015 capex will be positive (negative) if actual capex is higher (lower) than the estimate approved at the 2016–20 determination.

²¹ NER, cl. 6.5.1(e)(3).

²² NER, cl. S6.2.1(e)(4).

²³ NER, cl. S6.2.2A. Under the NER, cl. S6.2.2A(b), the exclusion of inefficient capex could only come from three areas: overspend in capex, margin paid to third party and capitalisation of opex as defined in cl. S6.2.2A (c), (d) and (e) of the NER.

²⁴ AER, *Capital expenditure incentive guideline*, November 2013, pp. 12–20.

²⁵ NER, cl. 11.60.5(a) and 11.62.

²⁶ Please refer to Appendix D of Attachment 5 of this draft decision for details.

²⁷ We will update any estimated capex with actual capex at the time of the next reset.

²⁸ For example, we make adjustment for movements in capitalised provisions if the actual capex amounts reported in the RIN include capitalised provisions.

²⁹ NER, cl. S6.2.1(e)(5).

³⁰ NER, cl. 6.12.1(18).

³¹ The use of forecast depreciation is consistent with the depreciation approach established in the 2016–20 distribution determination for Powercor. See (AER, *Final decision, Powercor distribution determination 2016 to 2020, attachment 2 – regulatory asset base*, May 2016, p. 13).

³² Refer to section 2.4.3 for the reasons.

- Subtracting any gross proceeds for asset disposals for the relevant year, by way of netting from capex to be added to the RAB.³³ We check these amounts against audited annual reporting RIN data.

These annual adjustments give the closing RAB for any particular year, which then becomes the opening RAB for the following year. Through this process the RFM rolls forward the RAB to the end of the 2016–20 regulatory control period. The PTRM used to calculate the annual revenue requirement for the 2021–26 regulatory control period generally adopts the same RAB roll forward approach as the RFM, although the annual adjustments to the RAB are based on forecasts, rather than actual amounts.³⁴

The opening RAB for the 2026–31 regulatory control period can be determined using depreciation based either on forecast or actual capex incurred during the 2021–26 regulatory control period.³⁵ To roll forward the RAB using depreciation based on forecast capex, we would use the forecast depreciation contained in the PTRM for the 2021–26 regulatory control period, adjusted for actual inflation. If the approach to roll forward the RAB using depreciation based on actual capex was adopted, we would recalculate the depreciation based on actual capex incurred during the 2021–26 regulatory control period.

Our decision on whether to use actual or forecast depreciation must be consistent with the capex incentive objective.³⁶ We have regard to:³⁷

- the incentives the service provider has to undertake efficient capex
- substitution possibilities between assets with different lives and the relative benefits of each
- the extent of overspending and inefficient overspending relative to the allowed forecast
- the capex incentive guideline
- the capital expenditure factors.

³³ NER, cl. S6.2.1(e)(6).

³⁴ NER, cl. S6.2.3.

³⁵ NER, cl. S6.2.2B.

³⁶ AER, *Final framework and approach for AusNet Services, CitiPower, Jemena, Powercor and United Energy*, January 2019, pp. 93–95.

³⁷ NER, cl. S6.2.2B(b) and (c).

2.3.1 Interrelationships

The RAB is an input into the determination of the return on capital and depreciation (return of capital) building block amounts.³⁸ Factors that influence the RAB will therefore flow through to these building block components and the annual revenue requirement. Other things being equal, a higher RAB increases both the return on capital and depreciation amounts.

The RAB is determined by various factors, including:

- the opening RAB (meaning the value of existing assets at the beginning of the regulatory control period)
- net capex³⁹
- depreciation
- indexation adjustment – so the RAB is presented in nominal terms, consistent with the rate of return.

The opening RAB depends on the value of existing assets and will depend on actual net capex, actual inflation outcomes and depreciation in the past.

The RAB when projected to the end of the regulatory control period increases due to both forecast new capex and the indexation adjustment. The size of the indexation adjustment depends on expected inflation (which also affects the nominal rate of return or WACC) and the size of the RAB at the start of each year.

Depreciation reduces the RAB. The forecast depreciation depends on the size of the opening RAB, the forecast net capex and depreciation schedules applied to the assets. By convention, the indexation adjustment is also offset against depreciation to prevent double counting of inflation in the RAB and WACC, which are both presented in nominal terms. This reduces the depreciation building block that feeds into the annual revenue requirement.

We maintain the RAB in real terms by indexing for inflation.⁴⁰ A nominal rate of return (WACC) is multiplied by the opening RAB to produce the return on capital building block.⁴¹ To prevent the double counting of inflation through the nominal WACC and indexed RAB,⁴² the regulatory depreciation building block has an offsetting reduction

³⁸ The size of the RAB also impacts the benchmark debt raising cost allowance. However, this amount is usually relatively small and therefore not a significant determinant of revenues overall.

³⁹ Net capex is gross capex less disposals and capital contributions. The rate of return or WACC also influences the size of the capex. This is because the capex is not depreciated in the year it is first incurred, but added to the RAB at the end of the year. Instead, the capex amount is escalated by half-year WACC to arrive at an end of year value. It then begins depreciating the following year.

⁴⁰ NER, cl. 6.3.2(a)(2), 6.5.1(e)(3).

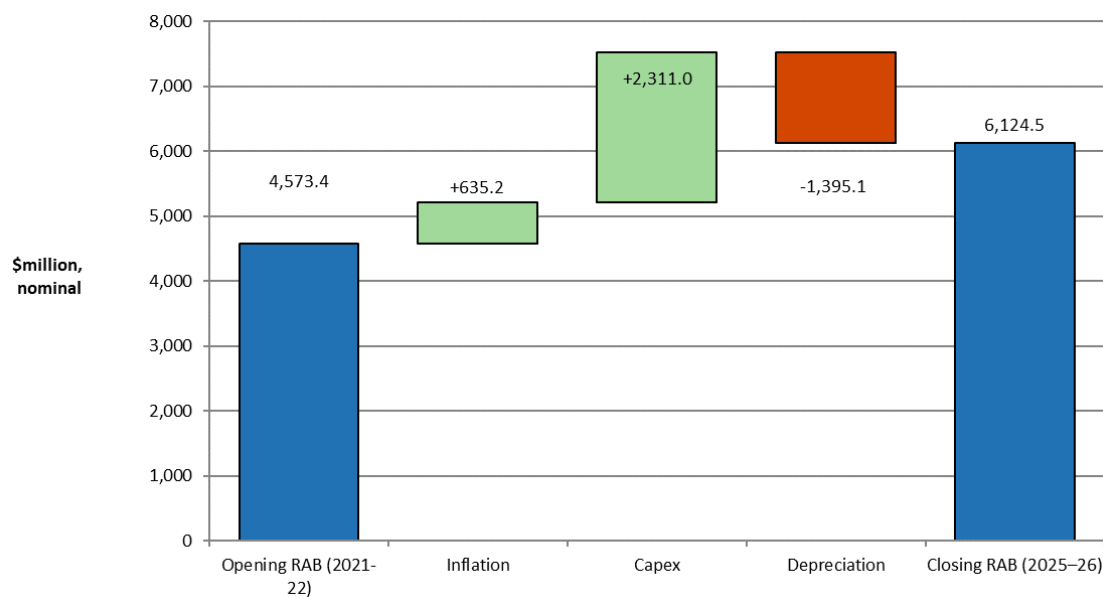
⁴¹ NER, cl. 6.5.2(a), 6.5.2(d)(2).

⁴² NER, cl. 6.4.3(b)(1)(ii).

for indexation of the RAB.⁴³ Indexation of the RAB and the offsetting adjustment made to depreciation results in smoother revenue recovery profile over the life of an asset than if the RAB was un-indexed. If the RAB was un-indexed, there would be no need for an offsetting adjustment to the depreciation calculation of total revenue. This alternative approach provides for overall revenues being higher early in the asset's life (as a result of more depreciation being returned to the distributor) and lower in the future—producing a steeper downward sloping profile of total revenue.⁴⁴ The implications of an un-indexed RAB are discussed further in attachment 4.

Figure 2.1 shows the key drivers of the changes in the RAB over the 2021–26 regulatory control period as proposed by Powercor. Overall, the closing RAB at the end of the 2021–26 regulatory control period would be 33.9 per cent higher for than the opening RAB at the start of that period based on the proposal, in nominal terms. The proposed forecast net capex increases the RAB by about 50.5 per cent. Expected inflation increases it by about 13.9 per cent. On the other hand, forecast depreciation reduces the RAB by about 30.5 per cent.

Figure 2.1 Key drivers of changes in the RAB proposed by Powercor (\$ million, nominal)



Source: Powercor, *PAL MOD 10.01 - RFM 5.5 year 2016–21*, January 2020.

Note: Capex is net of forecast disposals and capital contributions. It is inclusive of the half-year WACC to account for the timing assumptions in the PTRM.

⁴³ If the asset lives are extremely long, such that the RAB depreciation rate is lower than the inflation rate, then negative regulatory depreciation can emerge. The indexation adjustment is greater than the RAB depreciation in such circumstances. Please also refer to section 4.3.1 of attachment 4 of this draft decision for further explanation of the offsetting adjustment to the depreciation.

⁴⁴ A change of approach from an indexed RAB to an un-indexed RAB would result in an initial step change increase in revenues to preserve NPV neutrality.

We have largely accepted Powercor's depreciation proposal, subject to some input updates and modelling amendments for its accelerated depreciation amount, as it satisfies the requirements of the National Electricity Rules (NER) in terms of assigned asset lives. This is discussed in Attachment 4. The depreciation amount largely depends on the opening RAB and the proposed level of accelerated depreciation, which in turn depends on capex in the past.⁴⁵ Depreciation associated with forecast capex is a relatively smaller amount.

However, we do have concerns with the size of the forecast capex, the largest driver of the increase in the RAB over the 2021–26 regulatory control period, proposed by Powercor. A number of stakeholder submissions also raised concerns with the potential size of the RAB proposed by Powercor.⁴⁶ In this draft decision, we have reduced Powercor's proposed forecast capex by \$579.4 million (\$2020–21), or 27.1 per cent over the 2021–26 regulatory control period.⁴⁷ Our review of Powercor's forecast capex is set out in attachment 5 of this draft decision.

A ten per cent increase in the opening RAB at 1 July 2021 causes revenues to increase by about 1.4 per cent. However, the impact on revenues of the annual change in RAB depends on the source of the RAB change, as some drivers affect more than one building block cost.⁴⁸

2.4 Reasons for draft decision

We determine an opening RAB value for Powercor of \$4496.9 million (\$ nominal) as at 1 July 2021, a reduction of \$76.4 million (\$ nominal) or 1.7 per cent from the proposed value. We forecast a closing RAB value of \$5469.7 million by 30 June 2026. This represents a decrease of \$654.8 million, or 10.7 per cent compared to Powercor's proposal. The reasons for our decision are discussed below.

⁴⁵ At the time of this draft decision, the roll forward of Powercor's RAB includes estimated capex values for 2020 and the half year period for 1 January to 30 June 2021. We may update these estimated capex with a revised estimate in the final decision.

⁴⁶ Brotherhood of St Laurence and Victorian Council of Social Service and Renew, Victorian Community Organisations, *Response to proposals from Victorian electricity distribution network service providers for a revenue reset for the financial years 2021–2026 regulatory period*, May 2020, pp. 17, 18; Consumer Challenge Panel – sub-panel 17, *Advice to the AER on the Victorian Electricity Distributors' Regulatory Proposals for the Regulatory Determination 2021–26*, 10 June 2020, pp. 30, 31.

⁴⁷ This amount is net of asset disposals and excludes half-year WACC adjustment.

⁴⁸ If capex causes the RAB increase, return on capital, depreciation, and debt raising costs all increase too. If a reduction in depreciation causes the RAB increase, revenue could increase or decrease. In this case, the higher return on capital is offset (perhaps more than offset) by the reduction in depreciation allowance. Inflation naturally increases the RAB in nominal terms.

2.4.1 Opening RAB as at 1 July 2021

We determine an opening RAB value of \$4496.9 million as at 1 July 2021 for Powercor. This value is \$76.4 million (or 1.7 per cent) lower than Powercor's proposed opening RAB of \$4573.4 million (\$ nominal) as at 1 July 2021.⁴⁹

To determine the opening RAB for Powercor as at 1 July 2021 we have rolled forward the RAB over the 2016–21 period. In doing so, we reviewed the key inputs of Powercor's proposed RFM, such as forecast inflation, rate of return, gross capex values, capital contribution values, forecast depreciation amounts and asset lives. We found most of these inputs were correct and reconcile with relevant data sources such as ABS data, annual RINs and the 2016–20 decision models.⁵⁰ However, we have identified some of the proposed inputs required corrections and updates. Therefore, we have made the following amendments to Powercor's proposed RFM inputs:

- Amended the proposed end of period re-allocation for the asset class of 'Accelerated depreciation assets'. This relates to the accelerated depreciation of assets relating to its REFCL program and other assets, and our detailed reasons for this amendment are set out in section 4.4.2 of attachment 4 of this draft decision.
- Amended the forecast depreciation amounts, an input for the RAB roll forward calculation, for the 2020 'Distribution system assets', 2020 'SCADA/Network control' and 2017–20 'Equity raising cost (ERC)' asset classes to be consistent with the values in the 2020 return on debt update in the 2016–20 PTRM, as required under the 2016–20 distribution determination.⁵¹
- Amended the estimated gross capex and customer contribution inputs for 1 January to 30 June 2021 to be equal to half of the total amount for the 2020–21 financial year as set out in the reset RIN. Powercor agreed with this amendment.⁵²
- Removed the 'Old SWER ACRs' asset class as the assets have effectively been fully depreciated. There is no new capex allocated to this asset class during the 2021–26 regulatory control period. Powercor agreed with this amendment.⁵³
- Amended the 2016 equity raising cost value to be consistent with the 2020 return on debt update in the 2016–20 PTRM.
- Amended the 2018 capex inputs based on amendments to movements in capitalised provisions.

⁴⁹ Powercor, *PAL MOD 10.01 - RFM 5.5 year 2016–21 - Jan2020 - Public*, January 2020.

⁵⁰ At the time of this draft decision, the roll forward of Powercor's RAB includes estimated capex values for 2020 and 2021. We may update these estimated capex with a revised estimate in the final decision.

⁵¹ AER, *Final decision Powercor distribution determination 2016 to 2020, Attachment 2*, p. 13, May 2016.

The 2016–20 final decision is to roll forward the RAB for the commencement of Powercor's next regulatory control period using depreciation based on forecast capex (updated for actual inflation).

⁵² Powercor, *Response to AER IR#7A*, 26 May 2020.

⁵³ Powercor, *Response to AER IR#52*, 8 July 2020.

- Updated the 2019 estimated capex inputs with actual capex reported in the annual RIN for that year, which has become available after Powercor submitted its proposal. Powercor agreed with this amendment.⁵⁴
- Updated the inflation estimate for the 6 month period of 1 January to 30 June 2021 with actual inflation of 1.22 per cent. This value reflects the lagged CPI series and is calculated using actual June 2019 CPI to December 2019 CPI published by the ABS.⁵⁵
- Updated the forecast inputs for inflation, nominal WACC, equity raising costs and depreciation for the 6 month period of 1 January to 30 June 2021.

We also consider the extent to which our roll forward of the RAB to 1 July 2021 contributes to the achievement of the capital expenditure incentive objective.⁵⁶ As the Victorian distributors are moving from calendar regulatory years to financial regulatory years, the review period of past capex for this distribution determination will apply to the 2014–19 calendar regulatory years. Consistent with the requirements of the NER we have excluded the last two years of the current regulatory control period from the review of past capex for this distribution determination.⁵⁷ This approach ensures that actual capex (instead of estimated capex) is available when the review of past capex commences.

Powercor's actual capex incurred for 2014 to 2019 are below the forecast allowance set at the previous distribution determinations. Therefore, the overspending requirement for an efficiency review of past capex is not satisfied.⁵⁸ For the reasons discussed in attachment 5, we consider the capex incurred in those years is consistent with the capital expenditure criteria and can therefore be included in the RAB.⁵⁹

Further, for the purposes of this draft decision, we have included estimated capex for 2020 and the six month period of 1 January to 30 June 2021 in the RAB roll forward to 1 July 2021. At the next reset, the 2020 capex and the capex for the six month period of 2021 will form part of the review period for whether past capex should be excluded for inefficiency reasons.⁶⁰ Our RAB roll forward applies the incentive framework approved in the previous distribution determination, which included the use of a forecast depreciation approach in combination with the application of the capital expenditure sharing scheme (CESS).⁶¹ As such, we consider that the 2016–21 RAB roll forward contributes to an opening RAB (as at 1 July 2021) that includes capex that

⁵⁴ Powercor, *Response to AER IR#07B*, 19 June 2020.

⁵⁵ ABS, *6401.0 - Consumer Price Index, Australia*, accessed at 29 July 2020.

⁵⁶ NER, cl. 6.12.2(b).

⁵⁷ The first half of the 2021 calendar year will be considered a regulatory year for this purpose.

⁵⁸ NER, cl. S6.2.2A(c).

⁵⁹ Please see appendix D of Attachment 5 of this draft decision.

⁶⁰ Here, 'inefficiency' of past capex refers to three specific assessments (labelled the overspending, margin and capitalisation requirements) detailed in NER, cl. S6.2.2A. The details of our ex post assessment approach for capex are set out in AER, *Capital expenditure incentive guideline*, November 2013, pp. 12–20.

⁶¹ AER, *Final decision AusNet Services distribution determination 2016 to 2020, Attachment 2*, p. 20, May 2016.

reflects prudent and efficient costs, in accordance with the capital expenditure criteria.⁶²

2.4.2 Forecast closing RAB as at 30 June 2026

We forecast a closing RAB value of \$5469.7 million (\$ nominal) by 30 June 2026 for Powercor. This represents a reduction of \$654.8 million (10.7 per cent) compared to Powercor's proposed amount of \$6124.5 million (\$ nominal). The major driver of the difference in the closing RAB has been our draft decision to reduce Powercor's proposed forecast capex by \$627.6 million (\$ nominal) or 27.2 per cent. In real terms, we forecast the value of the RAB will increase by \$367.3 million (\$2020–21) or 8.2 per cent over the 2021–26 regulatory control period. This increase reflects our draft decision on the inputs for determining the forecast RAB in the PTRM.

The submissions from a number of stakeholders on Powercor's proposal raised concerns regarding the increase to the size of Powercor's RAB over the 2021–26 regulatory control period.⁶³ Our draft decision projects the RAB to increase by 6.9 per cent in real terms over the 2021–26 regulatory control period.⁶⁴ This compares to the historical increase of 31.7 per cent for the 2011–15 regulatory control period, and the estimated increase of 23.9 per cent over the current 2016–21 period.⁶⁵ Such movements in the RAB were driven largely by the higher capex spend in previous periods. The other drivers of the change in the size of the RAB depends on our assessment of its various components including expected inflation (Attachment 3), forecast depreciation (Attachment 4) and forecast capex (Attachment 5). Inflation and capex increase the RAB, while depreciation and disposals reduce it.

To determine the forecast RAB value for Powercor, we amended the following PTRM inputs:

- We reduced Powercor's proposed opening RAB value by \$76.4 million (\$ nominal) as at 1 July 2021 (section 2.4.1).
- We reduced Powercor's proposed forecast capex for the 2021–26 regulatory control period by \$627.6 million (\$ nominal) or 27.2 per cent (Attachment 5).⁶⁶
- We reduced Powercor's proposed forecast straight-line depreciation for the 2021–26 regulatory control period by \$96.1 million (\$ nominal) or 6.9 per cent (Attachment 4).

⁶² NER, cll. 6.4A(a), 6.5.7(a), 6.5.7(c) and 6.12.2(b).

⁶³ Brotherhood of St Laurence and Victorian Council of Social Service and Renew, Victorian Community Organisations, *Response to proposals from Victorian electricity distribution network service providers for a revenue reset for the financial years 2021–2026 regulatory period*, May 2020, pp. 17, 18; Consumer Challenge Panel – sub-panel 17, *Advice to the AER on the Victorian Electricity Distributors' Regulatory Proposals for the Regulatory Determination 2021–26*, 10 June 2020, pp. 30, 31.

⁶⁴ Real RAB change is calculated in \$2020–21.

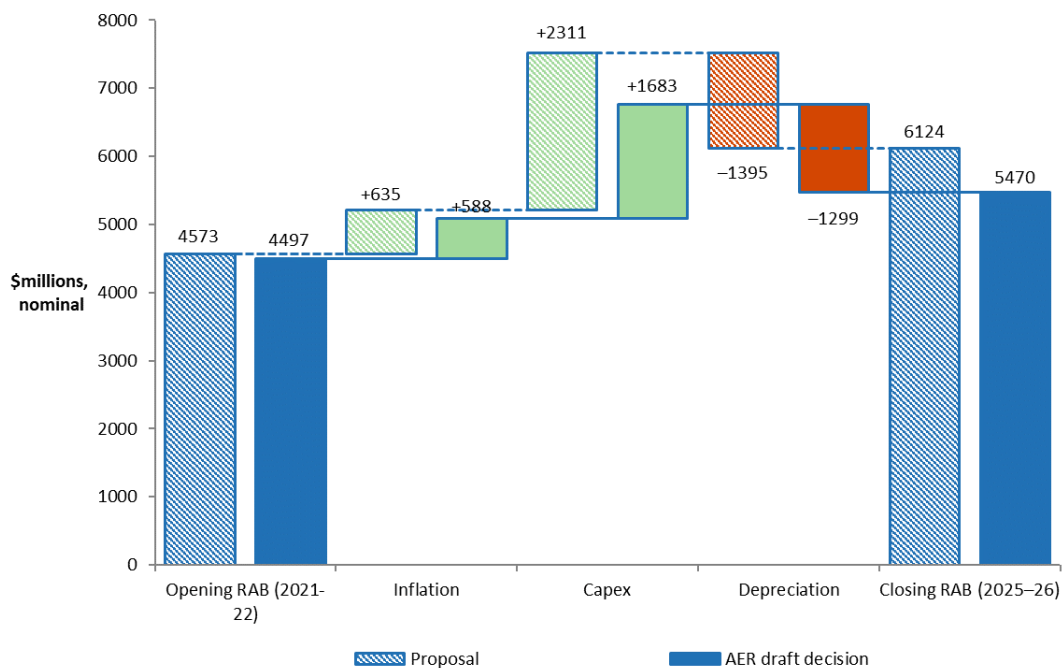
⁶⁵ In nominal terms the RAB increased by 49.4 per cent over the 2011–15 regulatory control period and estimated to increase by 36.0 per cent over the 2016–21 period.

⁶⁶ Capex net of disposals and customer contributions, and inclusive of half-year WACC adjustment.

- We updated Powercor's proposed expected inflation rate of 2.4 per cent per annum for the 2021–26 regulatory control period to 2.37 per cent per annum (attachment 3). This resulted in a decrease to the indexation of the RAB component for the 2021–26 regulatory control period by \$46.8 million (\$ nominal) or 7.4 per cent.⁶⁷

Figure 2.2 shows the key drivers of the change in Powercor's RAB over the 2021–26 regulatory control period for this draft decision. Overall the closing RAB at the end of the 2021–26 regulatory control period is forecast to be 21.6 per cent higher than the opening RAB at the start of that period in nominal terms. The approved forecast net capex and expected inflation increase the RAB by about 37.4 per cent and 13.1 per cent respectively. Forecast depreciation, on the other hand, reduces the RAB by about 28.9 per cent.

Figure 2.2 Key drivers of changes in the RAB – Powercor's proposal compared with AER's draft decision (\$ million, nominal)



Source: AER analysis.

Note: Capex is net of forecast disposals and capital contributions. It is inclusive of the half-year WACC to account for the timing assumptions in the PTRM.

2.4.3 Application of depreciation approach in RAB roll forward for next reset

⁶⁷ The calculated decrease to the RAB indexation component amount due to updating for expected inflation is based on input data provided in Powercor's proposed PTRM.

We accept Powercor's proposal on the depreciation approach to be applied to establish its RAB at the commencement of the 2026–31 regulatory control period. We determine that the depreciation approach will be based on the depreciation schedules (straight-line) using forecast capex at the asset class level approved for the 2021–26 regulatory control period.⁶⁸

Powercor proposed to use the forecast depreciation approach to roll forward its RAB for the commencement of the 2026–31 regulatory control period,⁶⁹ consistent with our position in the *Framework and approach*.⁷⁰

We stated in the *Framework and approach* that depreciation used to roll forward the RAB in the next distribution determination could be based on either:⁷¹

- Actual capex incurred during the regulatory control period (actual depreciation). We roll forward the RAB based on actual capex less the depreciation on the actual capex incurred by the distributor, or
- The capex amount forecast at the start of the regulatory control period (forecast depreciation). We roll forward the RAB based on actual capex less the depreciation on the forecast capex approved for the regulatory control period.

We have used forecast depreciation for this draft decision when rolling forward the opening RAB at the commencement of the 2021–26 regulatory control period (section 2.4.1). The use of forecast depreciation to establish the opening RAB for the commencement of the 2026–31 regulatory control period at the next reset therefore maintains the current approach.

As discussed in Attachment 9, Powercor is currently subject to the CESS for the 2015–20 regulatory control period.⁷² We will continue to apply the CESS to Powercor over the 2021–26 regulatory control period. We consider that the CESS will provide sufficient incentives for Powercor to achieve capex efficiency gains over that period. We are satisfied that the use of a forecast depreciation approach in combination with the application of the CESS and our other ex post capex measures are sufficient to achieve the capex incentive objective.⁷³

⁶⁸ NER, cl. 6.12.1(18) and S6.2.2B.

⁶⁹ Powercor, *Regulatory proposal 2021–26*, January 2020, p. 148.

⁷⁰ AER, *Final framework and approach for AusNet Services, CitiPower, Jemena, Powercor and United Energy*, January 2019, p. 12.

⁷¹ AER, *Final framework and approach for AusNet Services, CitiPower, Jemena, Powercor and United Energy*, January 2019, p. 93.

⁷² We note that CESS does not apply for the six month period of 1 January to 30 June 2021. Please see section 9.4 of attachment 9 of this draft decision for further details.

⁷³ Our ex post capex measures are set out in the capex incentives guideline, AER, *Capital expenditure incentive guideline for electricity network service providers*, November 2013, pp. 13–19, 20–21. The guideline also sets out how all our capex incentive measures are consistent with the capex incentive objective.

Shortened forms

Shortened form	Extended form
ABS	Australian Bureau of Statistics
AEMC	Australian Energy Market Commission
AER	Australian Energy Regulator
capex	capital expenditure
CCP17	Consumer Challenge Panel, sub-panel 17
CESS	capital expenditure sharing scheme
CPI	consumer price index
distributor	distribution network service provider
NER	National Electricity Rules
opex	operating expenditure
PTRM	post-tax revenue model
RAB	regulatory asset base
RFM	roll forward model
RIN	regulatory information notice
SCS	standard control services
WACC	weighted average cost of capital